

Fig.1

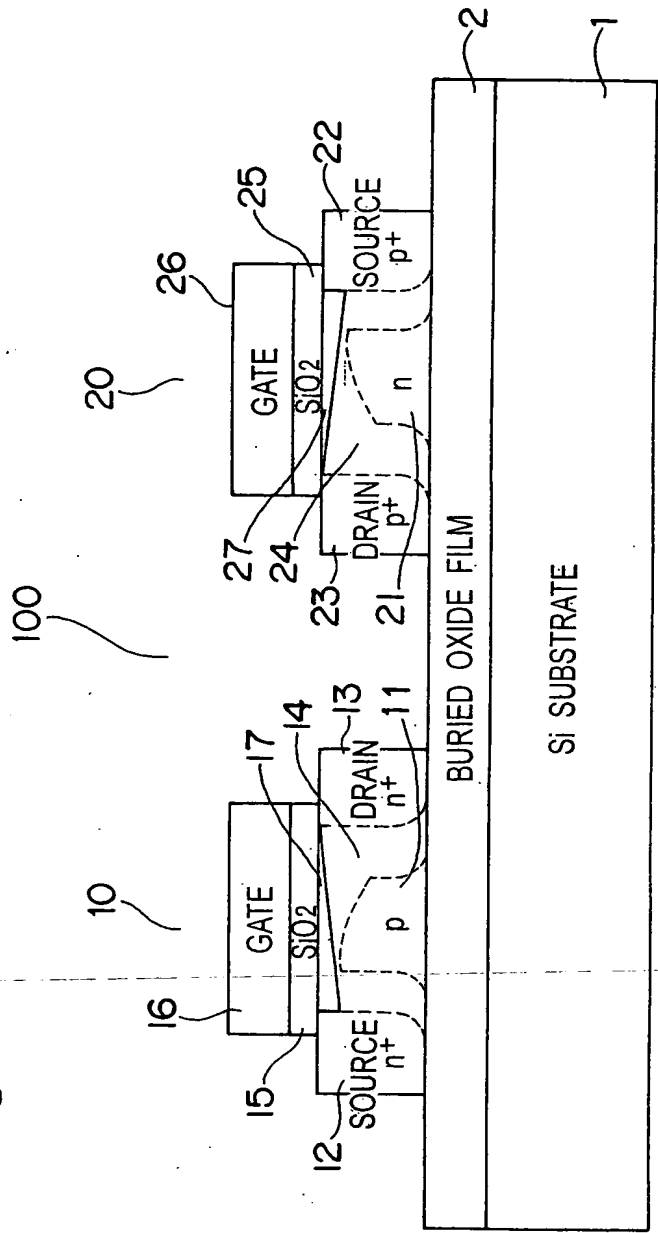


Fig.2

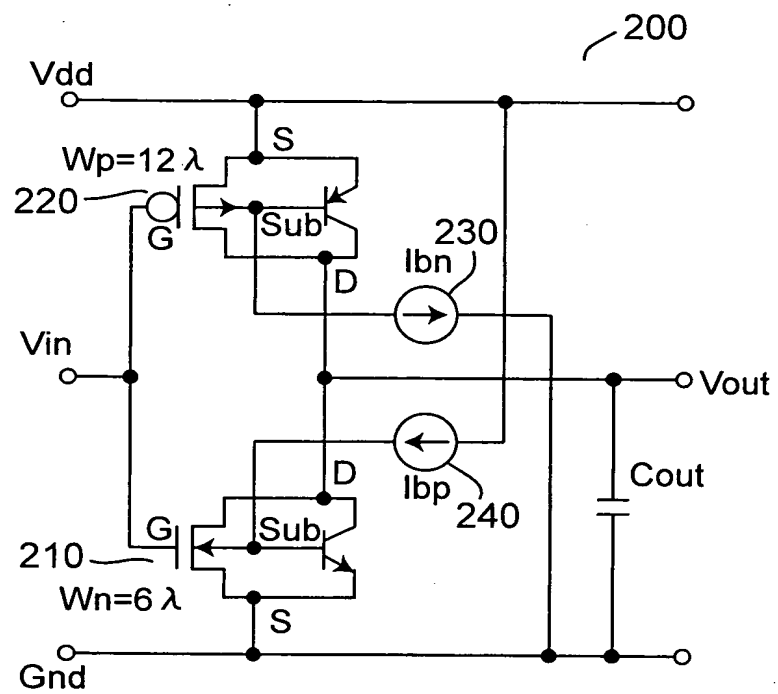
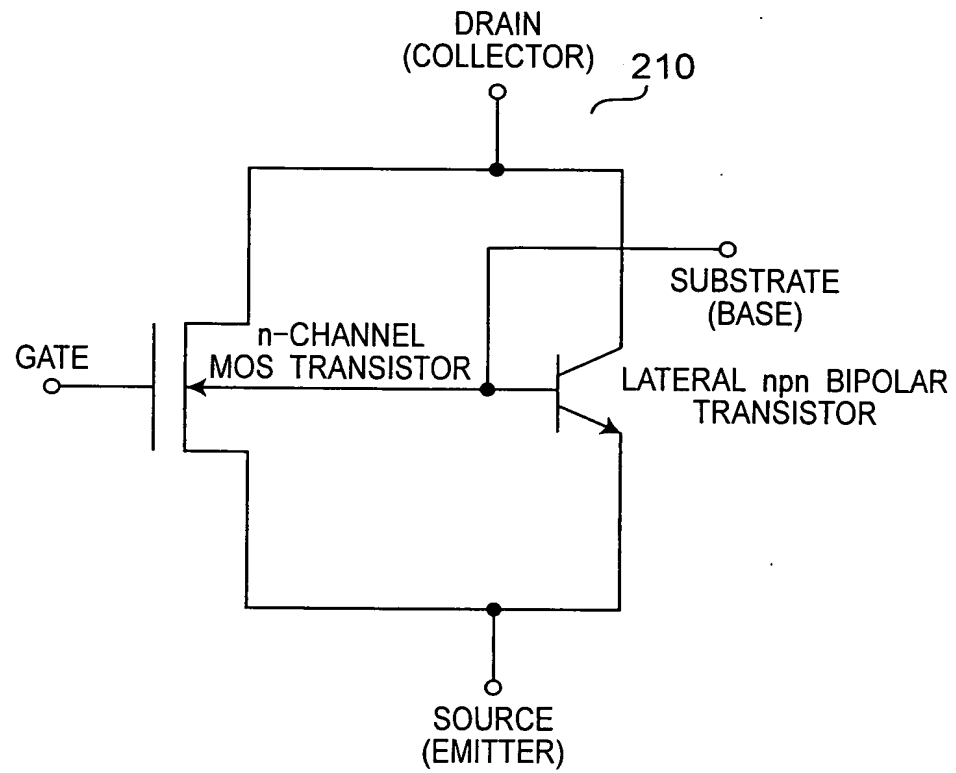


Fig.3



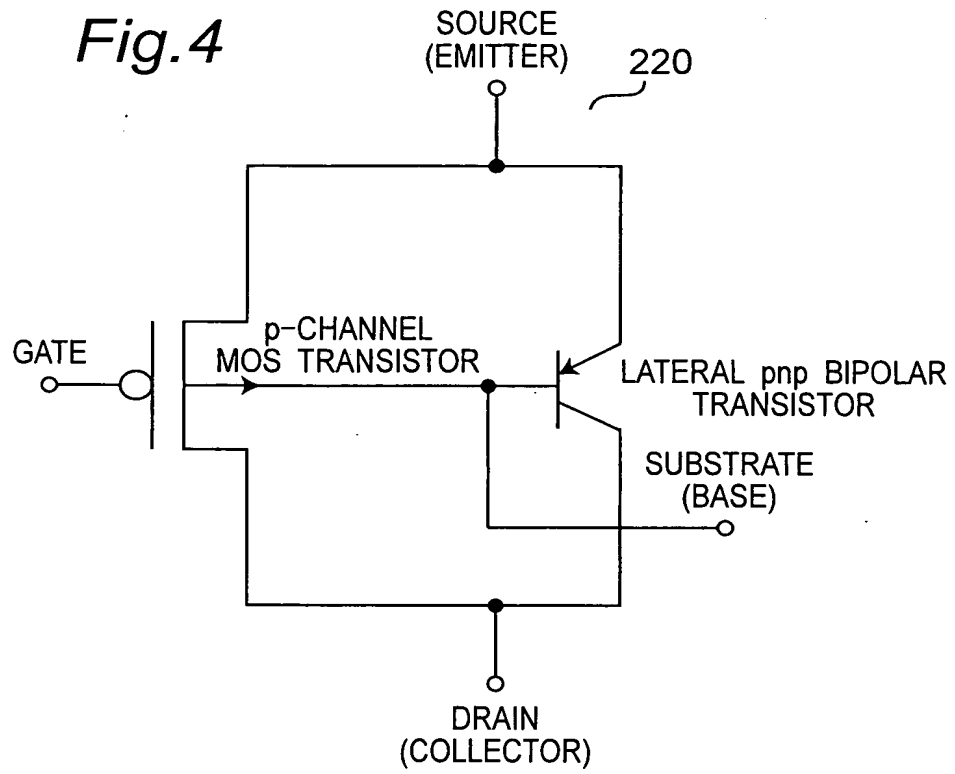
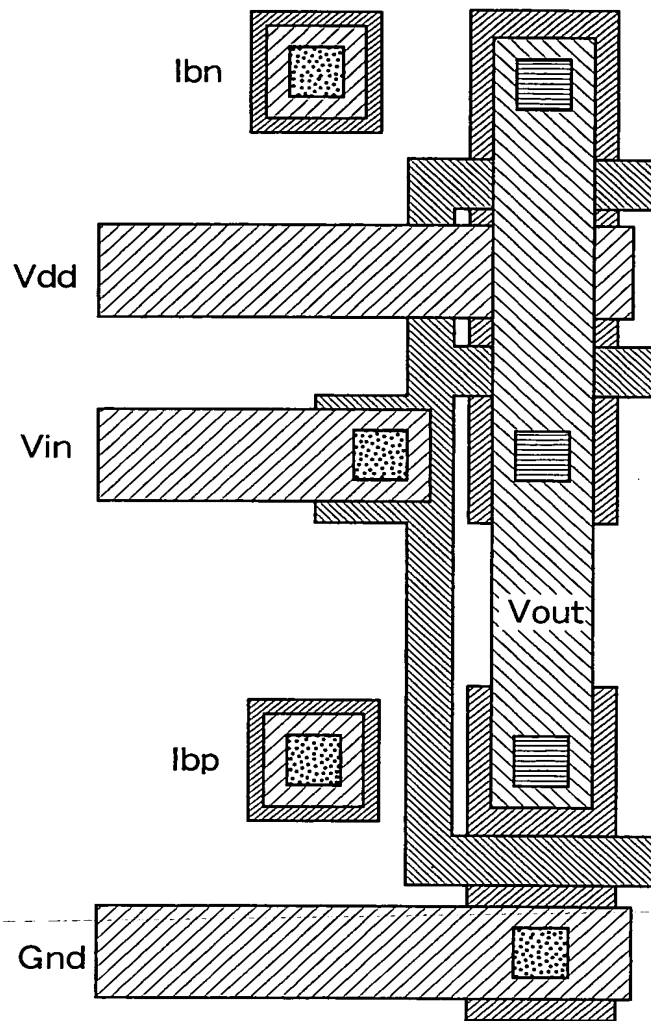


Fig.5







					
Active	Poly	Metal1	Metal2	Contact	Via

Fig.6

WAVEFORM OF INPUT VOLTAGE AND CURRENT PULSE

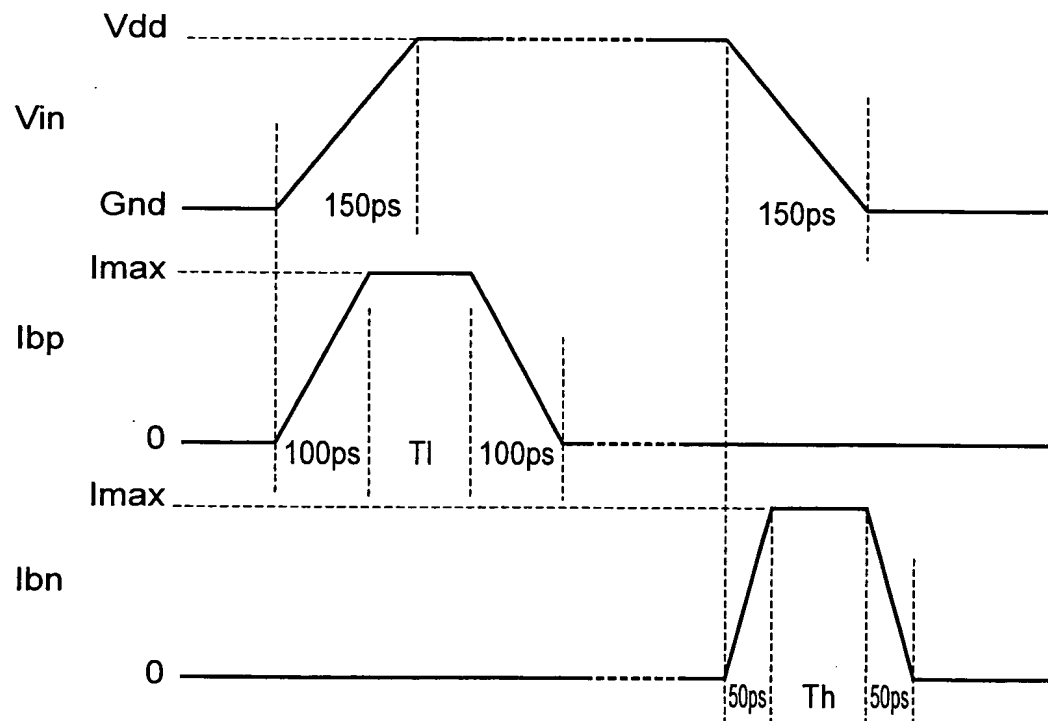


Fig. 7

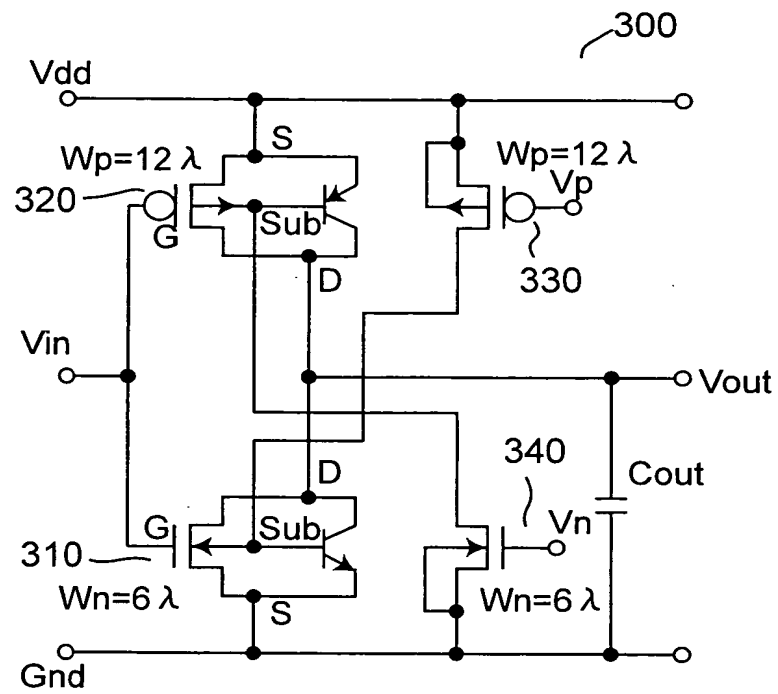


Fig.8

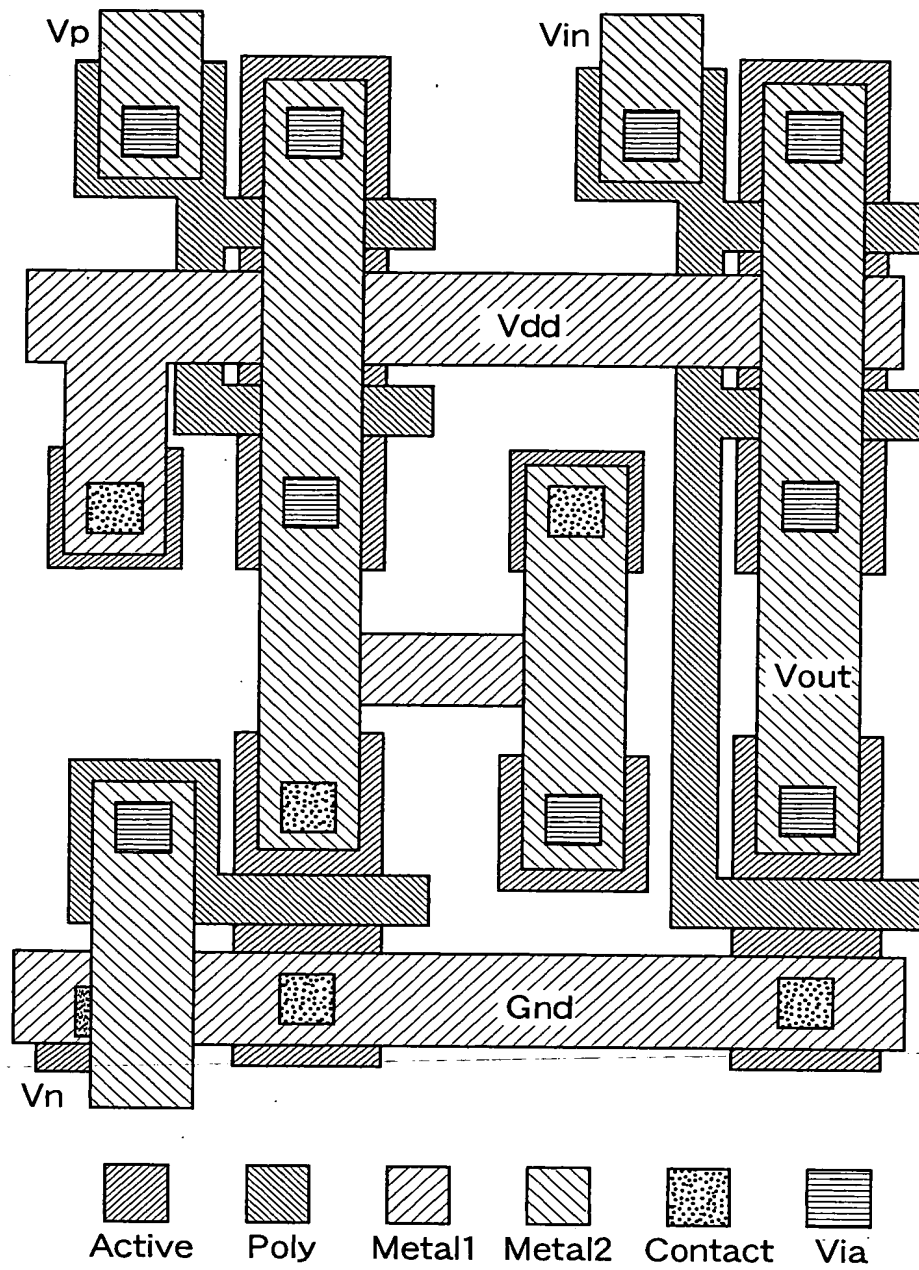


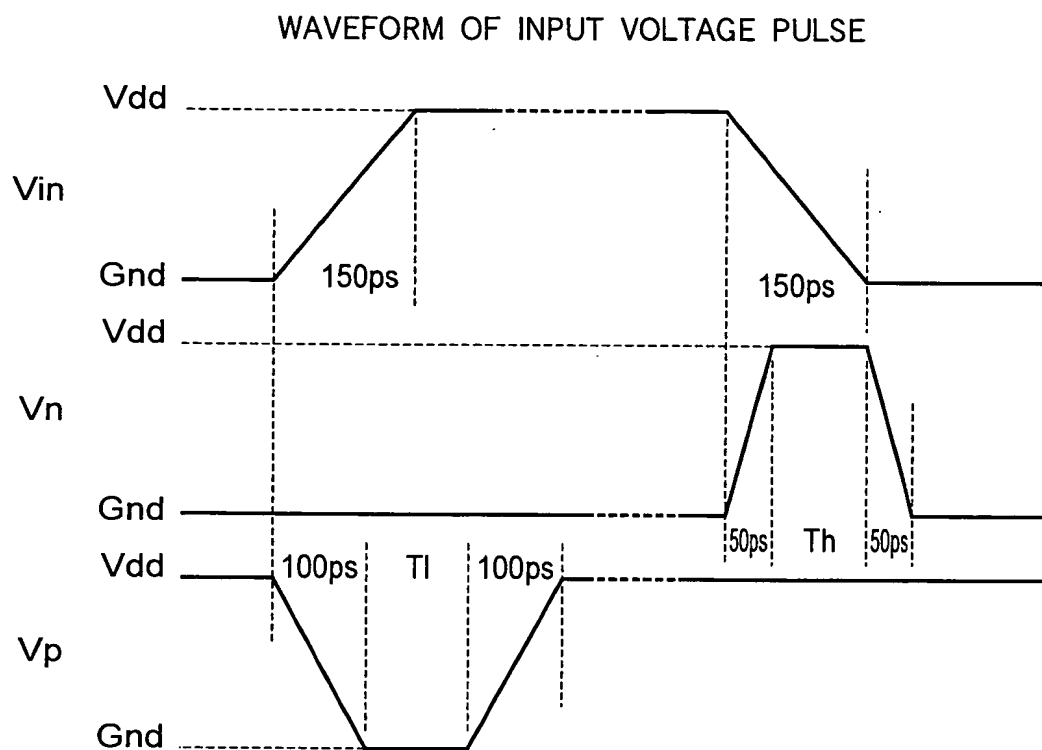
Fig.9

Fig. 10

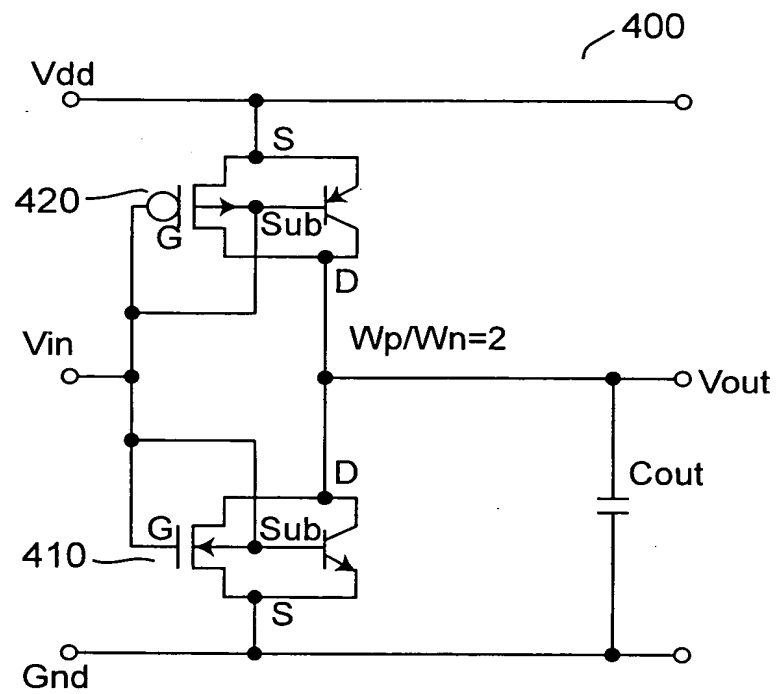


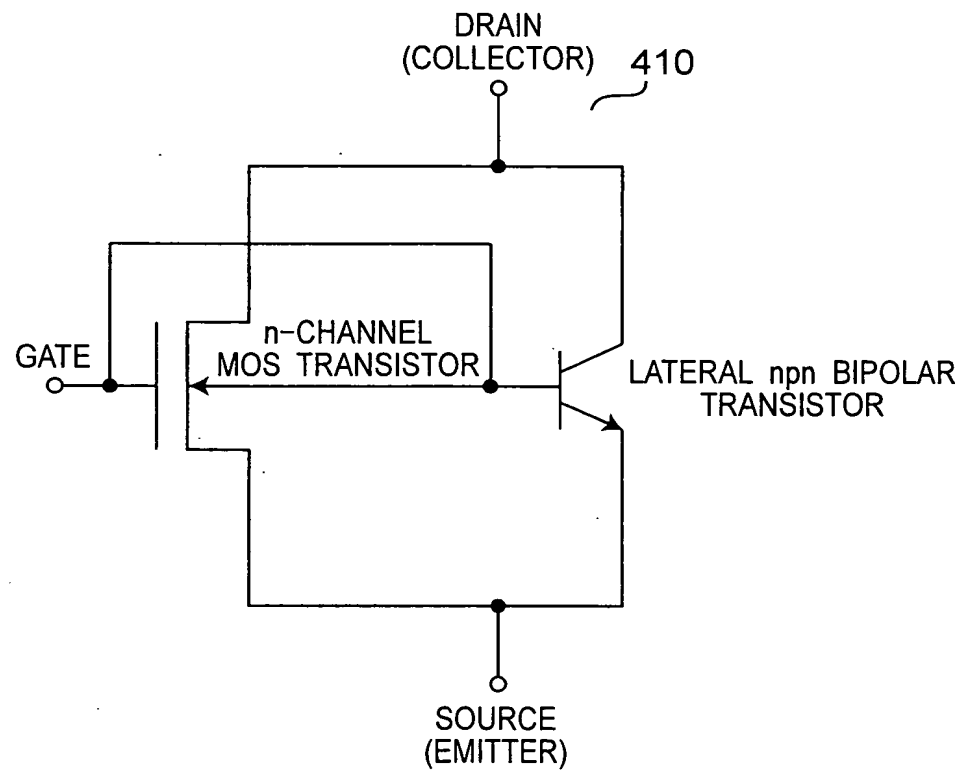
Fig. 11

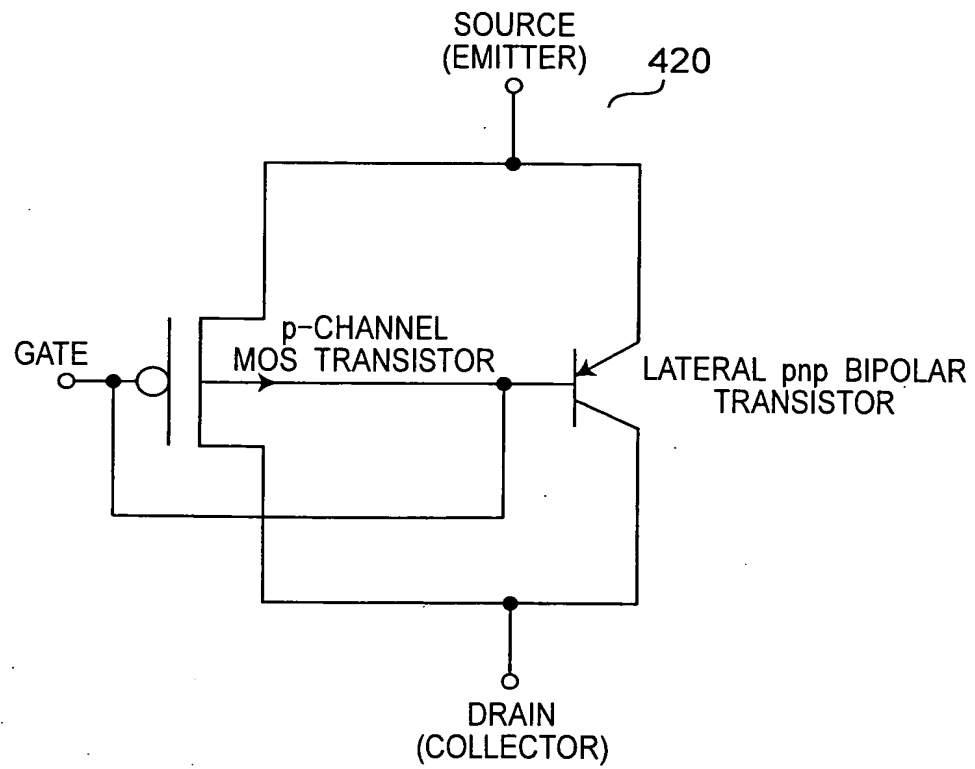
Fig. 12

Fig.13

WAVEFORM OF INPUT VOLTAGE PULSE

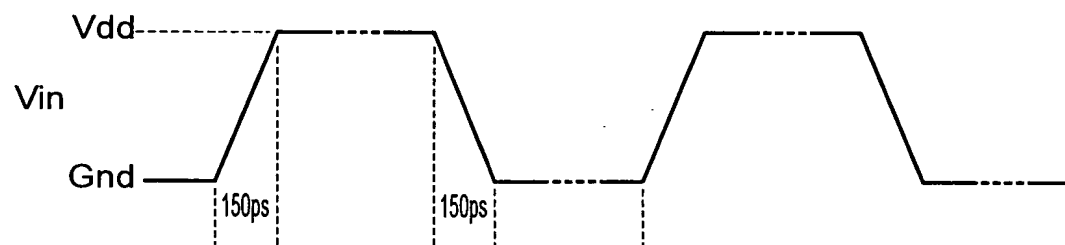
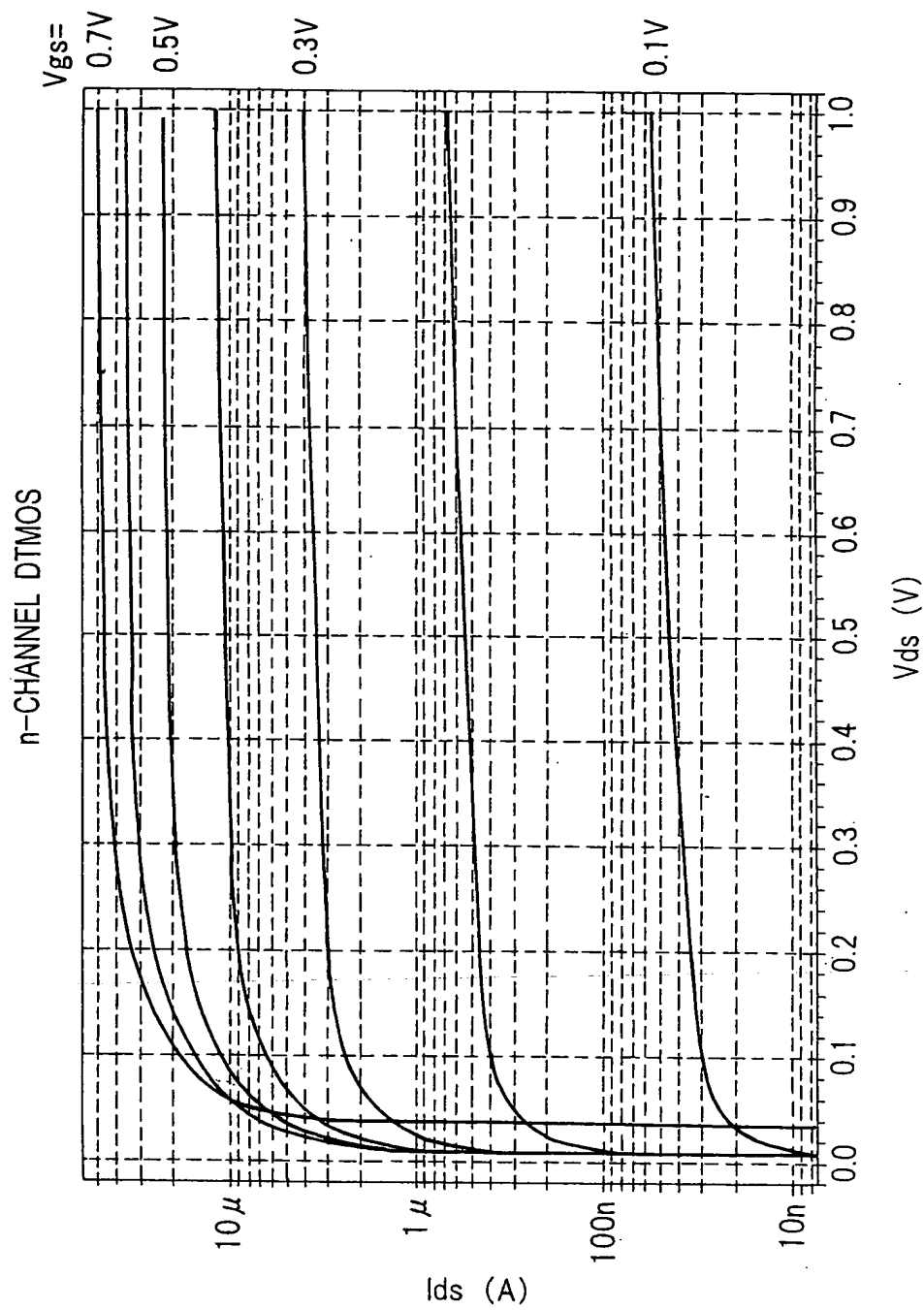


Fig. 14



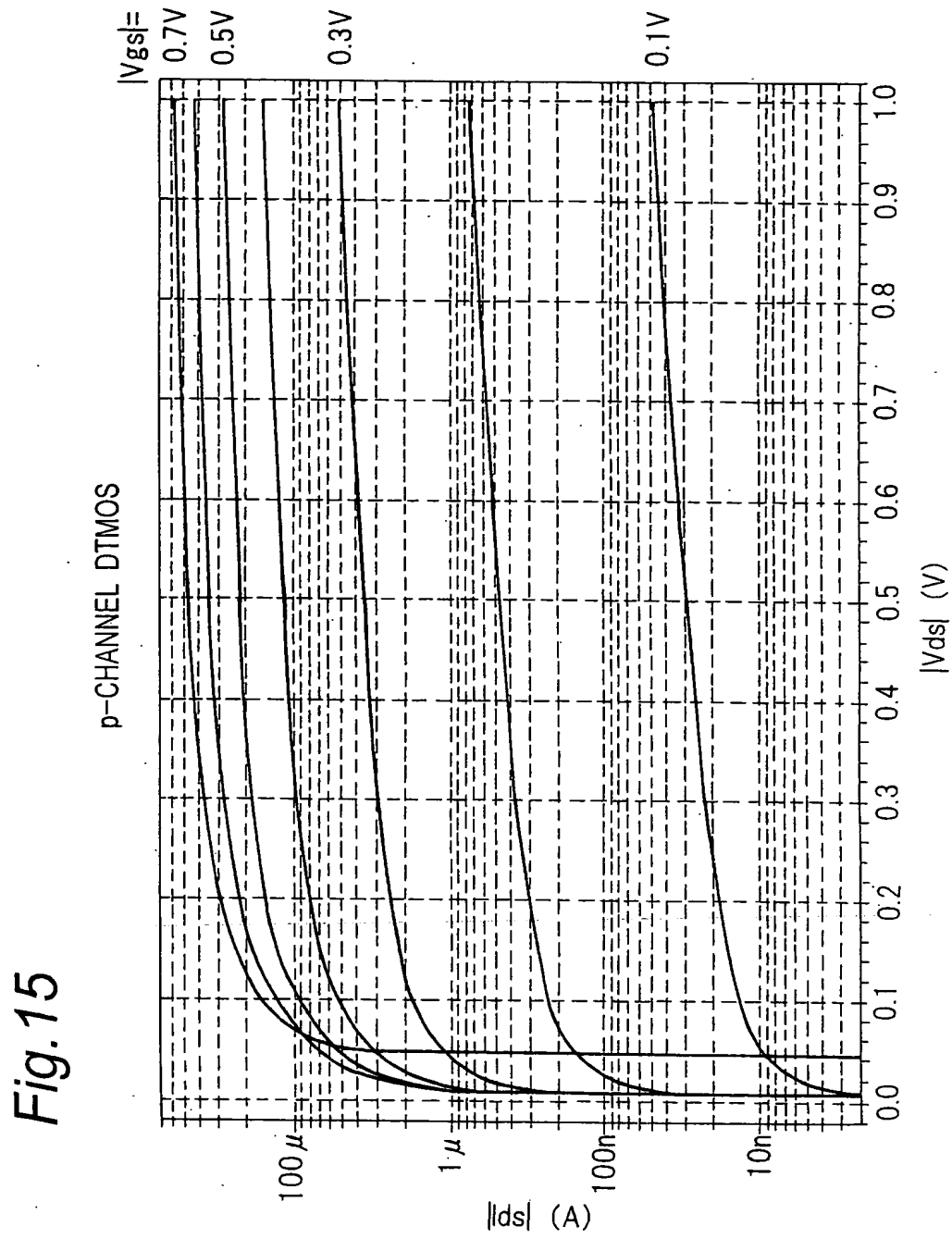


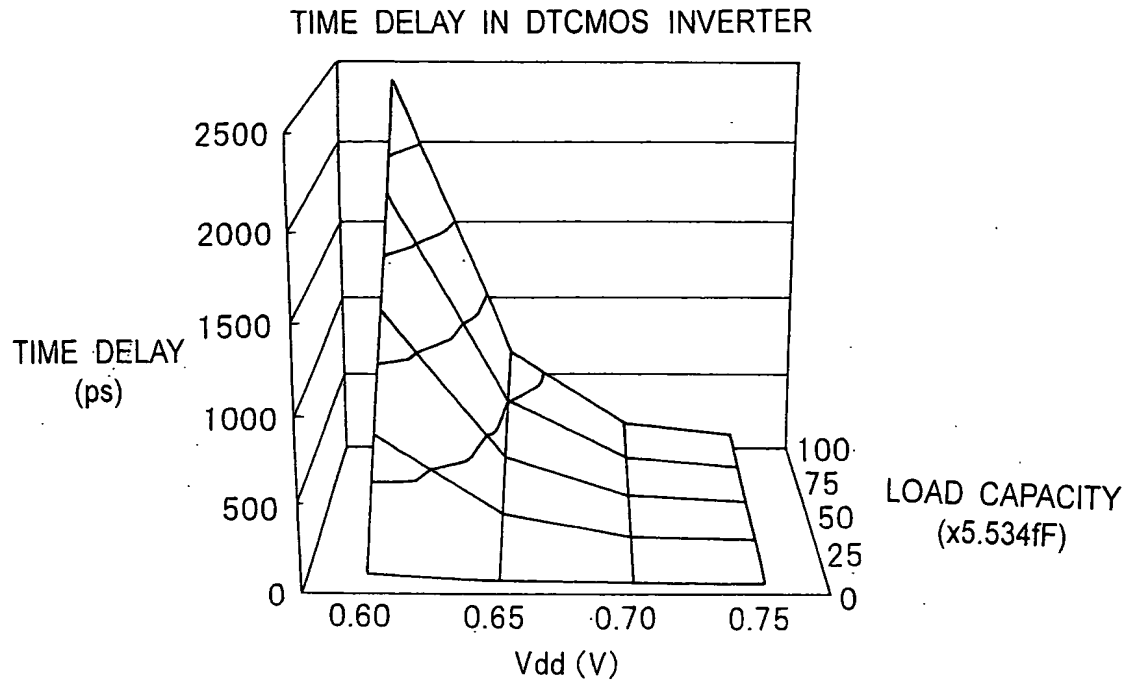
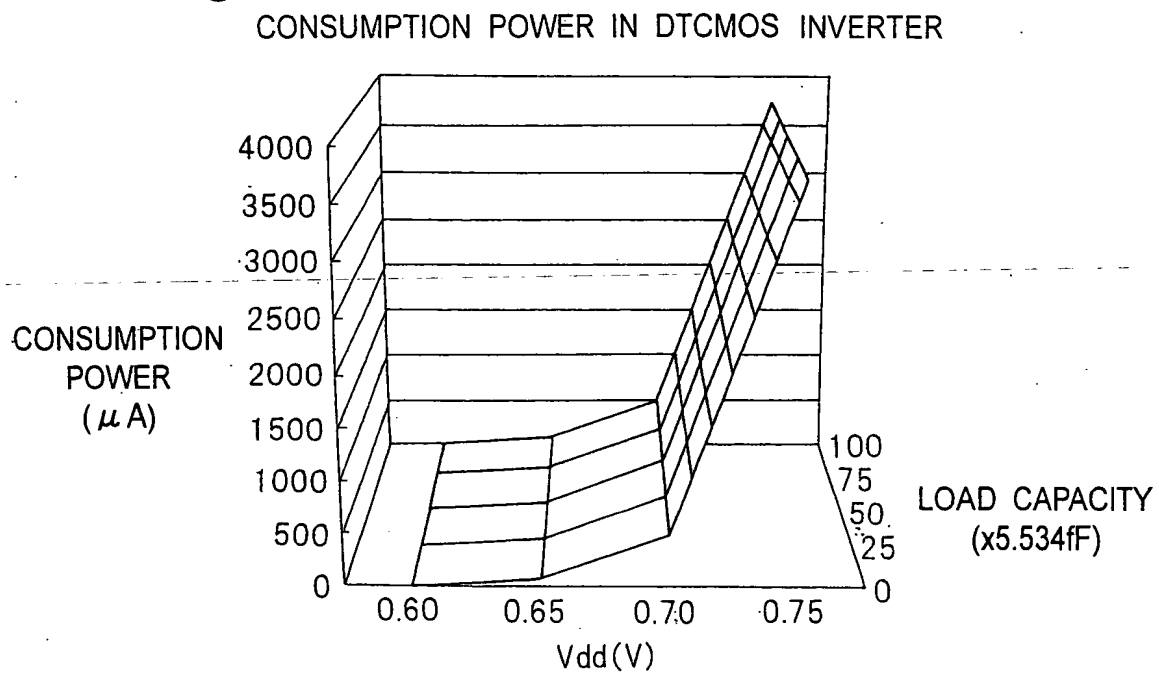
Fig. 16A*Fig. 16B*

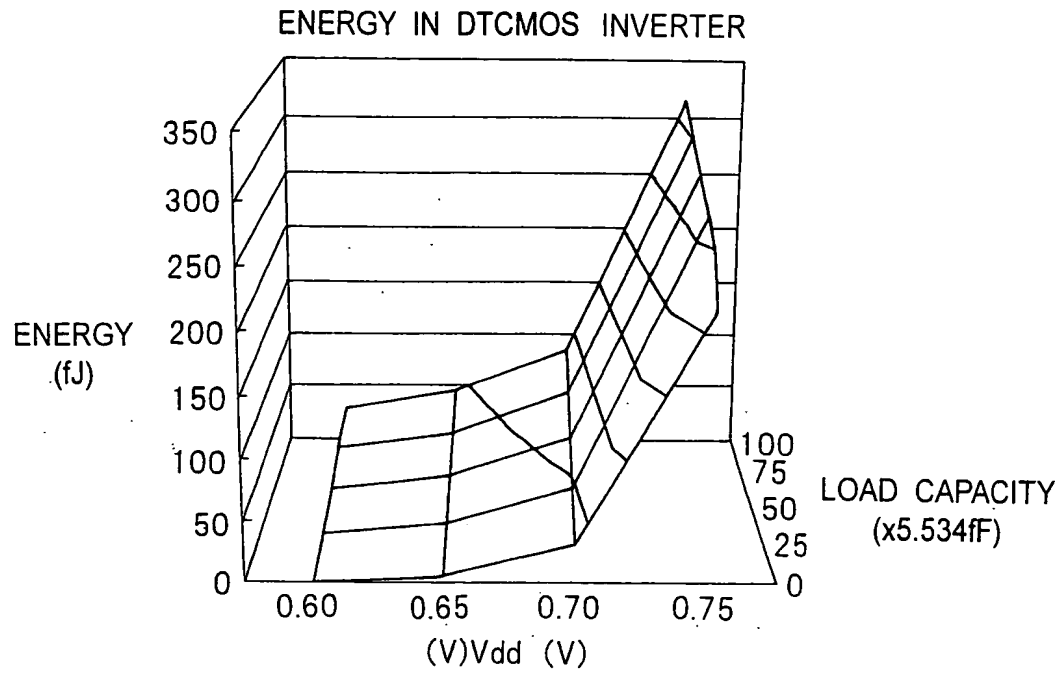
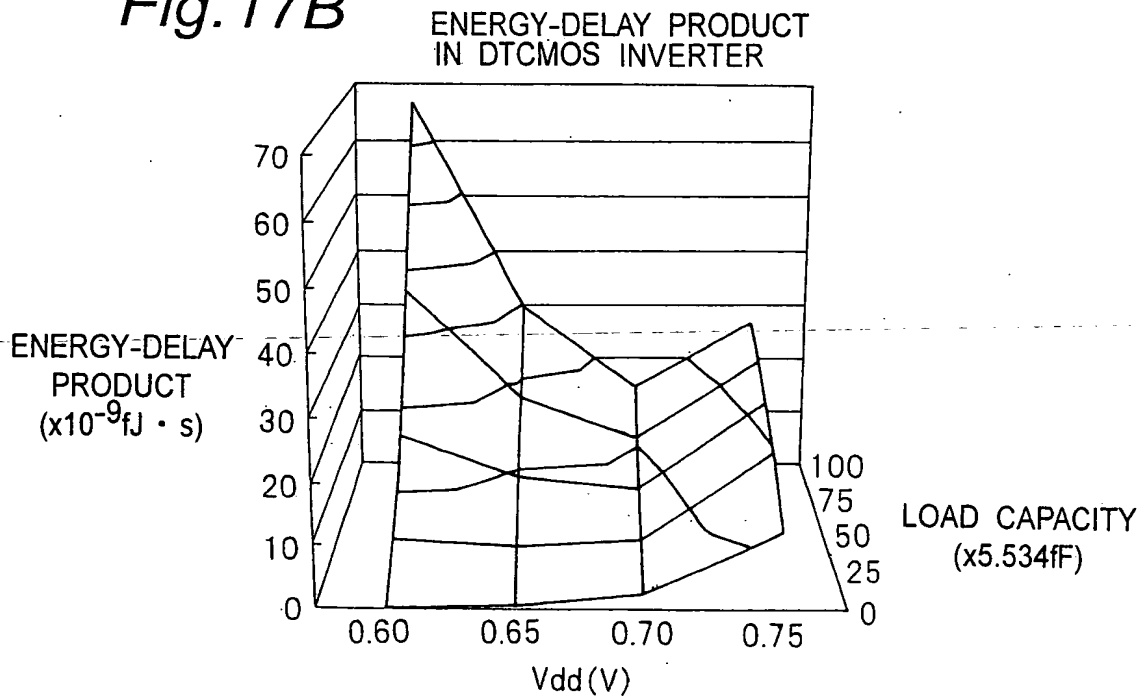
Fig. 17A*Fig. 17B*

Fig.18

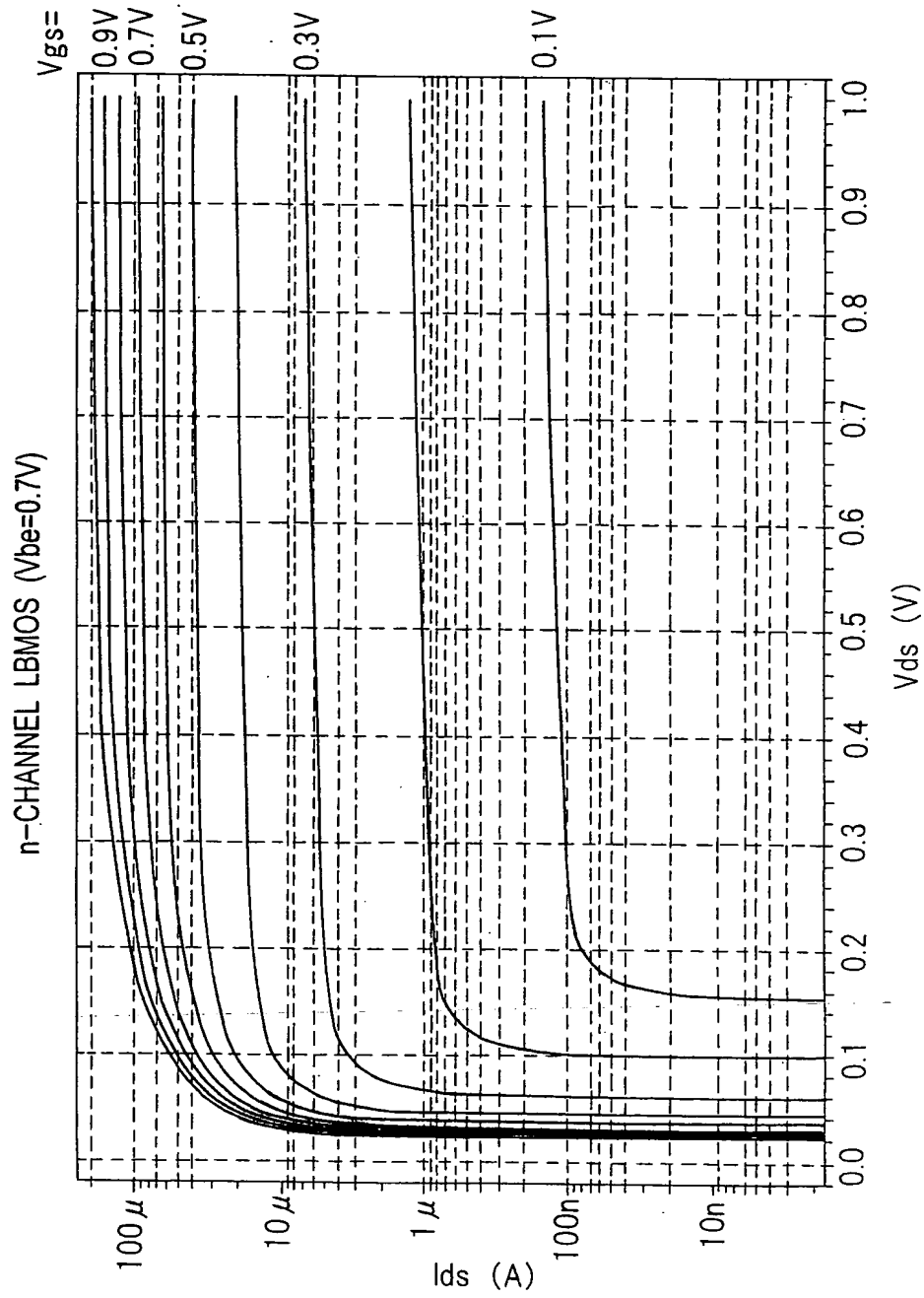
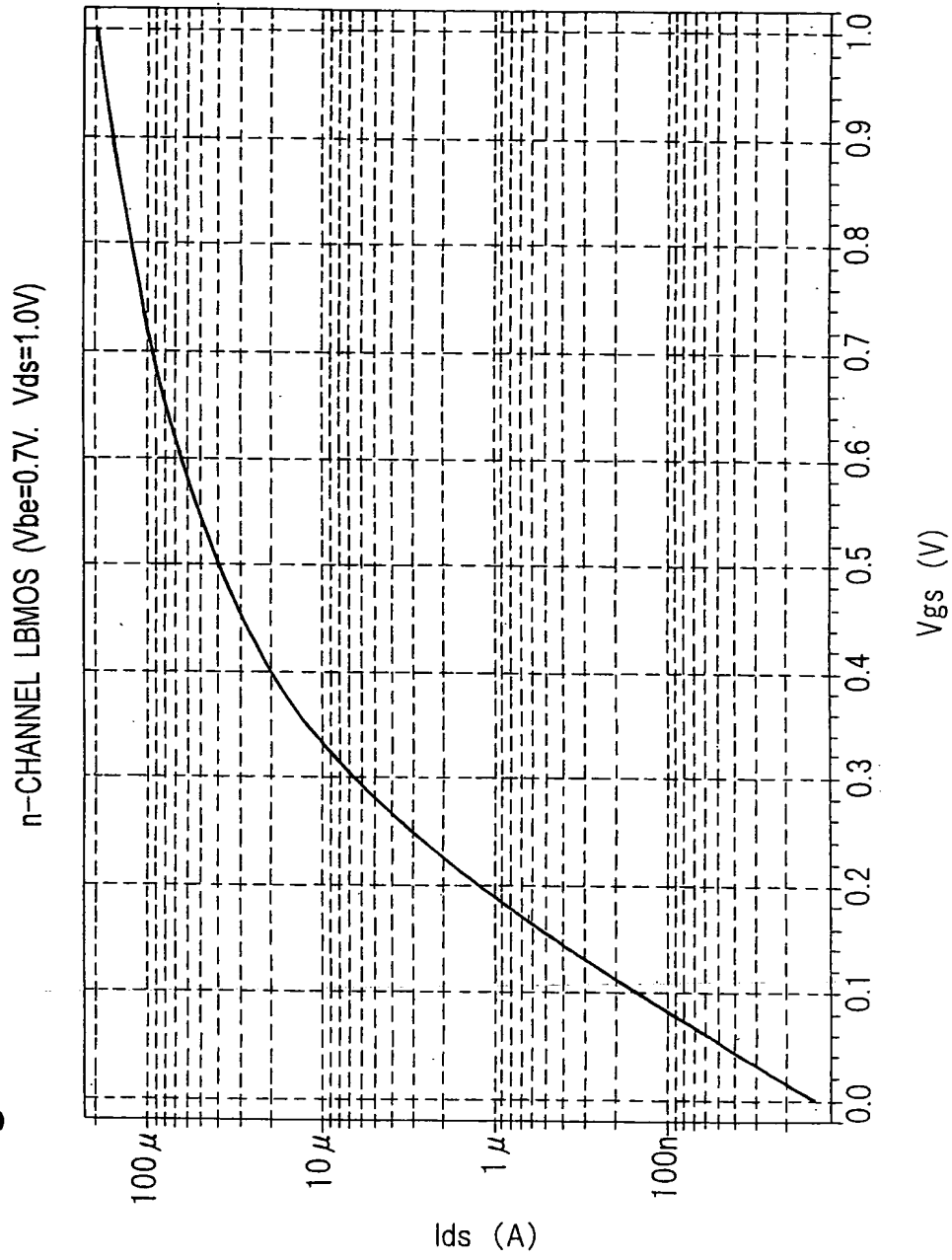
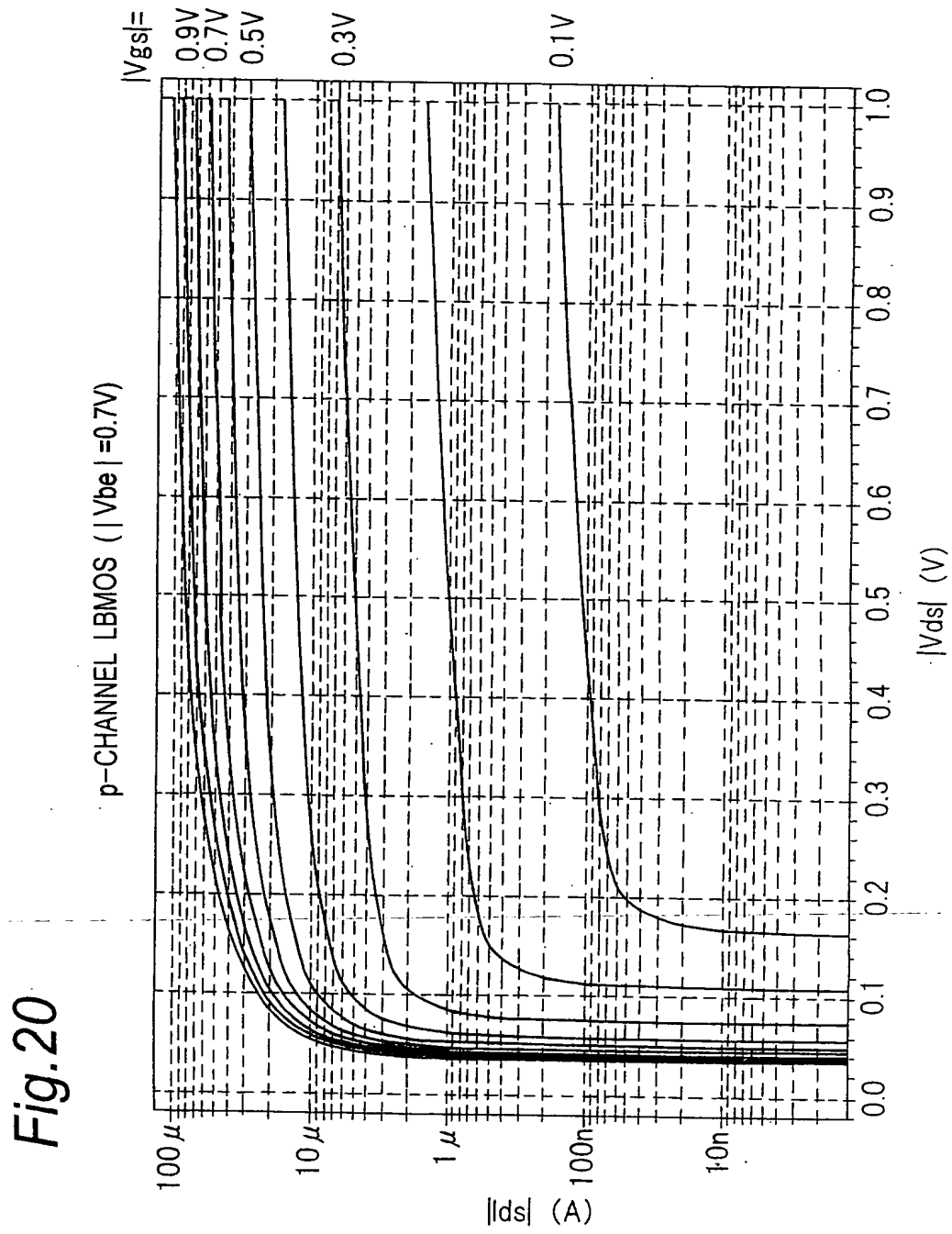


Fig. 19





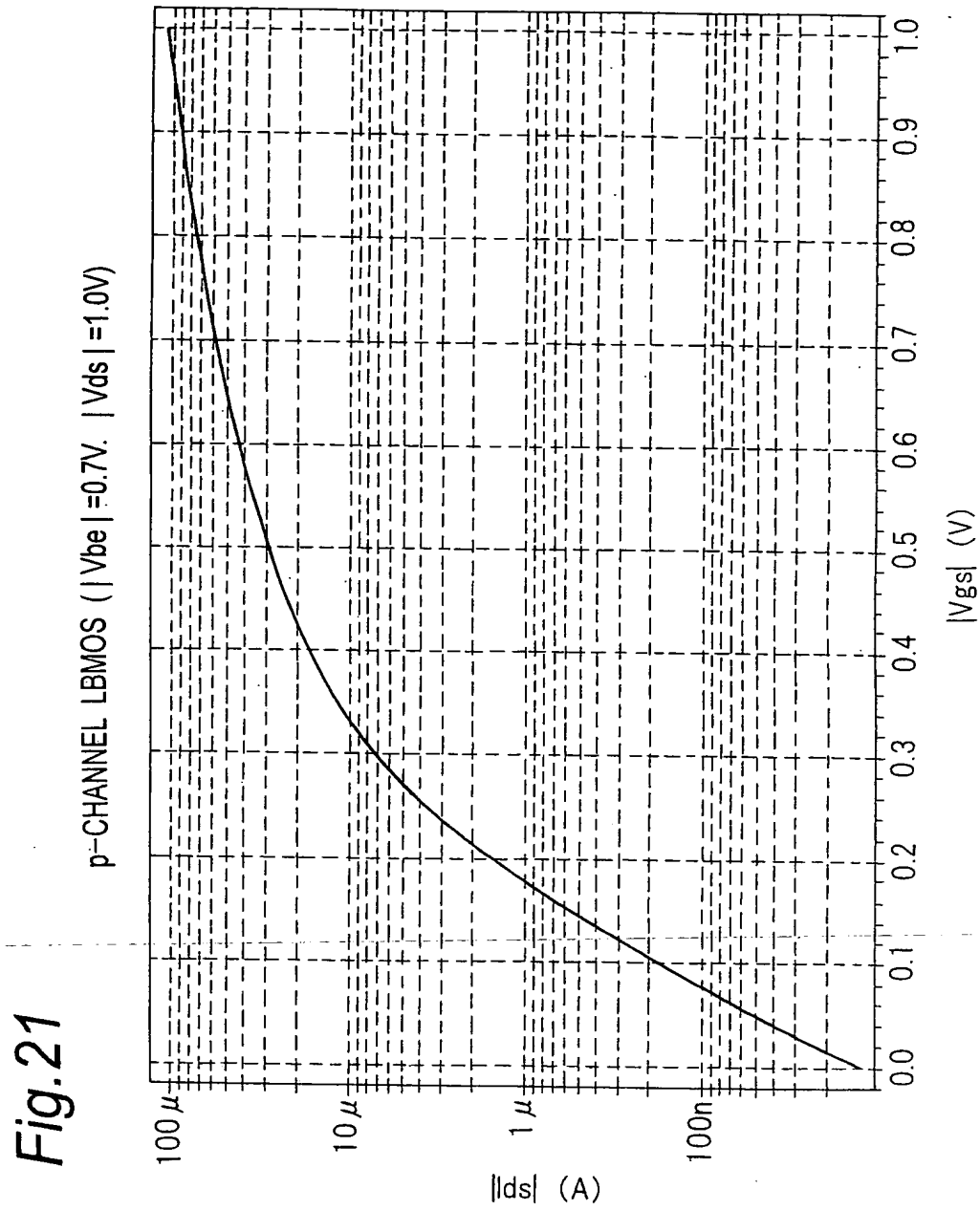
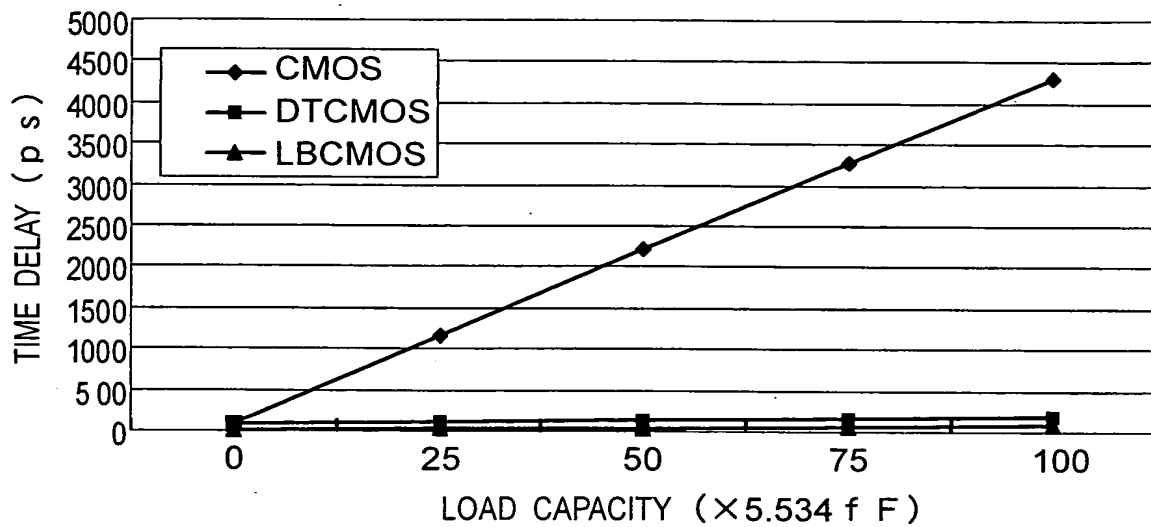


Fig.22A

TIME DELAY IN LBCMOS INVERTER DUE TO CURRENT SOURCE
($V_{dd}=0.7V$, $I_{max}=75\mu A$, $T_h=100ps$)

*Fig.22B*

CONSUMPTION POWER IN LBCMOS INVERTER DUE TO CURRENT SOURCE
($V_{dd}=0.7V$, $I_{max}=75\mu A$, $T_h=100ps$)

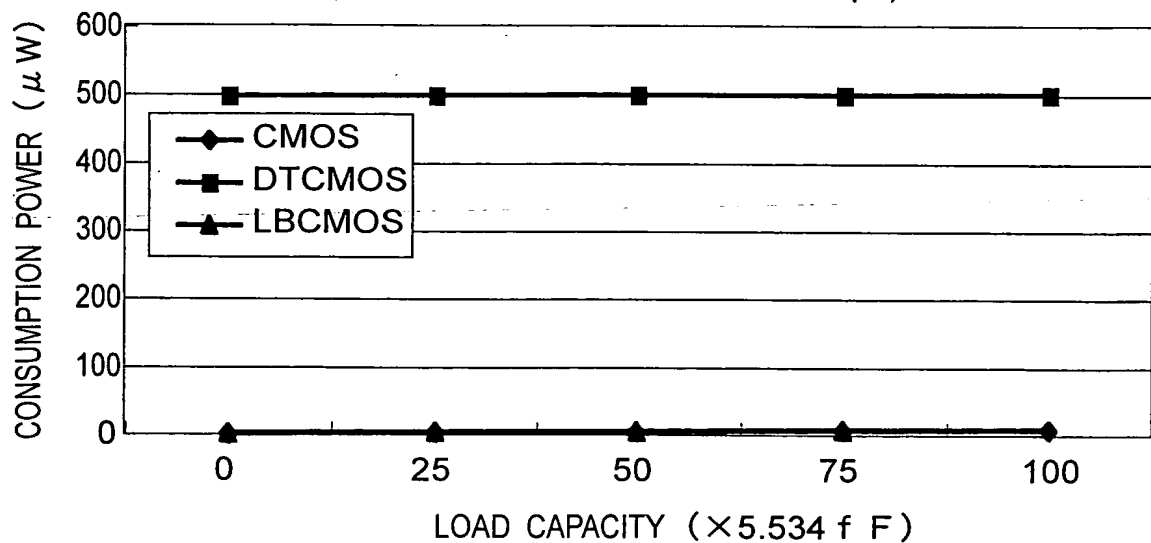
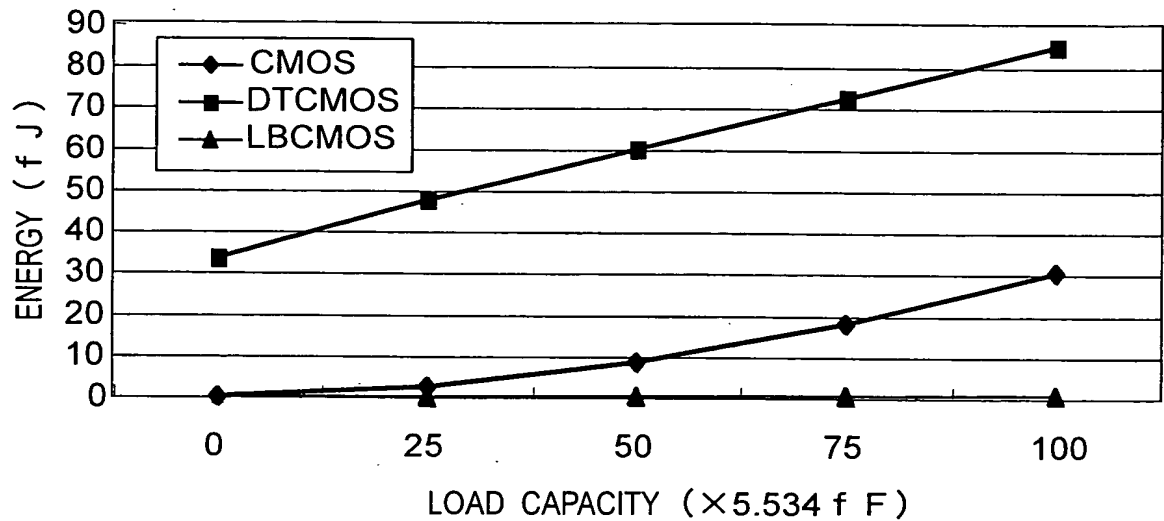


Fig.23A

ENERGY IN LBCMOS INVERTER DUE TO CURRENT SOURCE
($V_{dd}=0.7V$, $I_{max}=75\mu A$, $T_h=100ps$)

**Fig.23B**

ENERGY-DELAY PRODUCT IN LBCMOS INVERTER DUE TO CURRENT SOURCE
($V_{dd}=0.7V$, $I_{max}=75\mu A$, $T_h=100ps$)

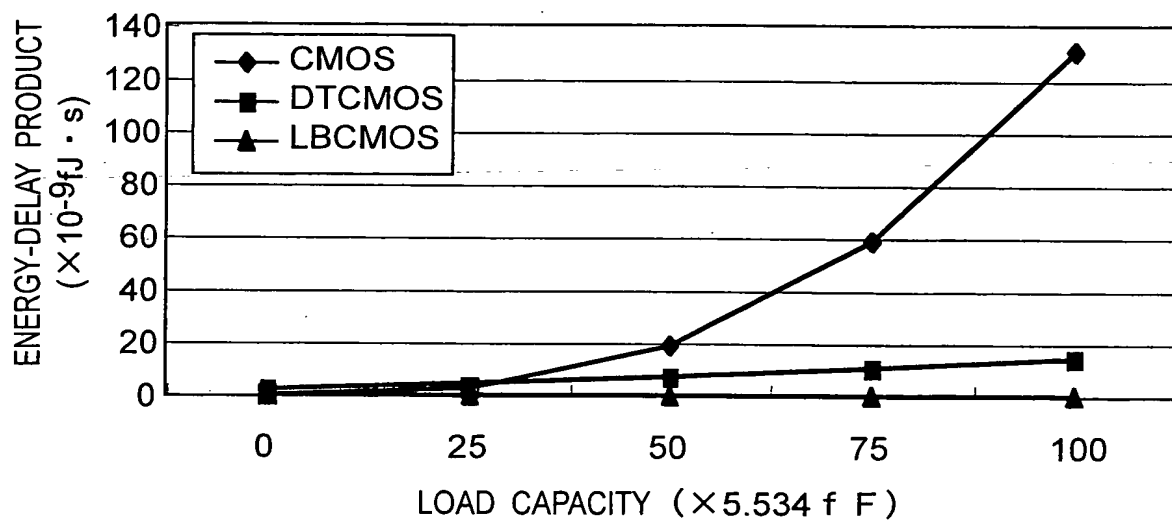
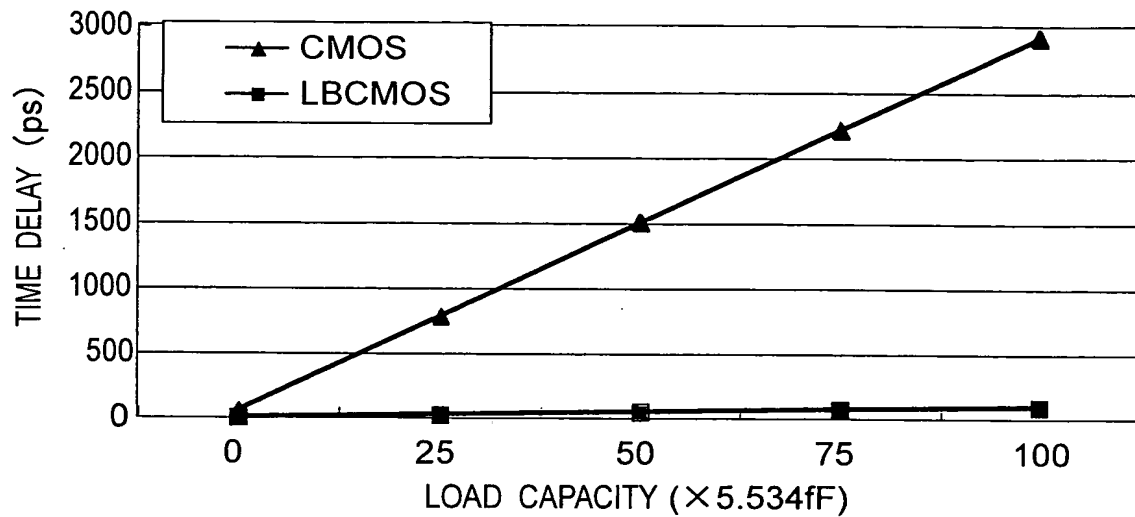


Fig.24A

TIME DELAY IN LBCMOS INVERTER DUE TO CURRENT SOURCE
(V_{dd}=1.0V, I_{max}=75 μ A, Th=100ps)

**Fig.24B**

CONSUMPTION POWER IN LBCMOS INVERTER DUE TO CURRENT SOURCE
(V_{dd}=1.0V, I_{max}=75 μ A, Th=100ps)

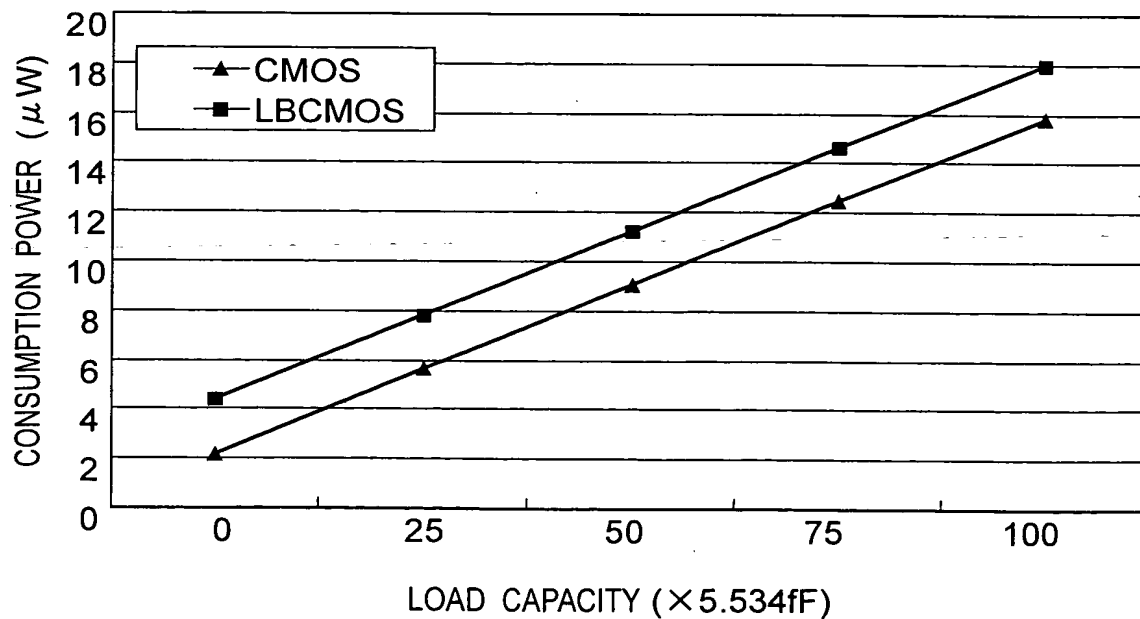
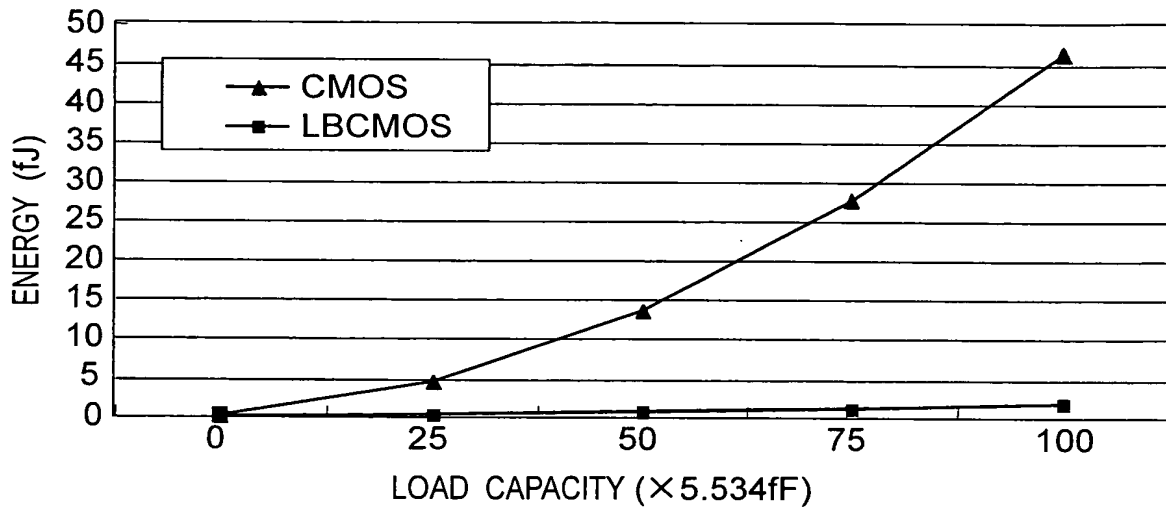


Fig.25A

ENERGY IN LBCMOS INVERTER DUE TO CURRENT SOURCE
($V_{dd}=1.0V$, $I_{max}=75\mu A$, $T_h=100ps$)

**Fig.25B**

ENERGY-DELAY PRODUCT IN LBCMOS INVERTER DUE TO CURRENT SOURCE
($V_{dd}=1.0V$, $I_{max}=75\mu A$, $T_h=100ps$)

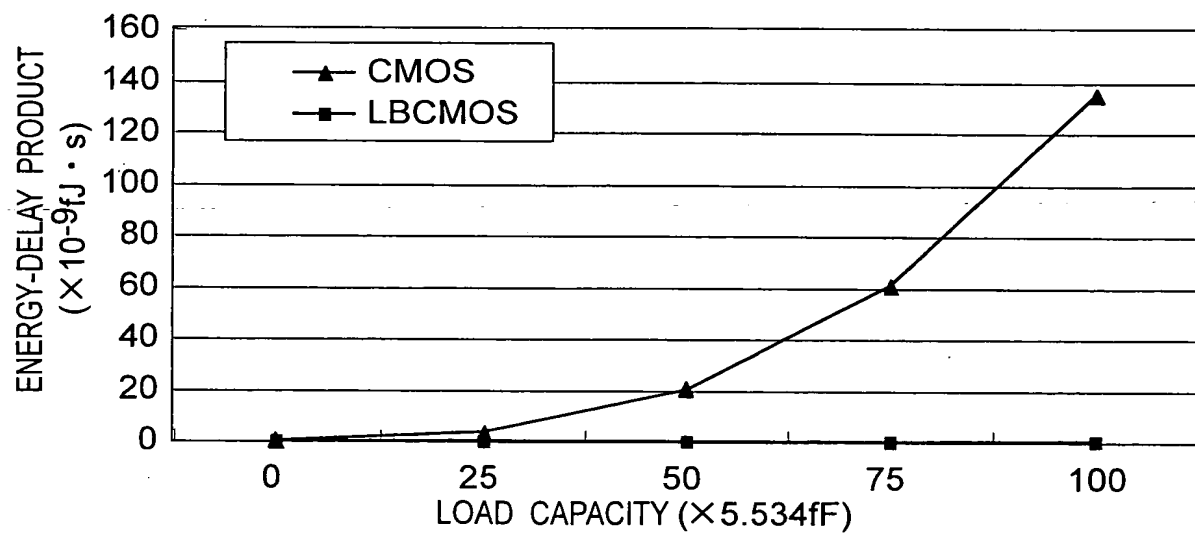


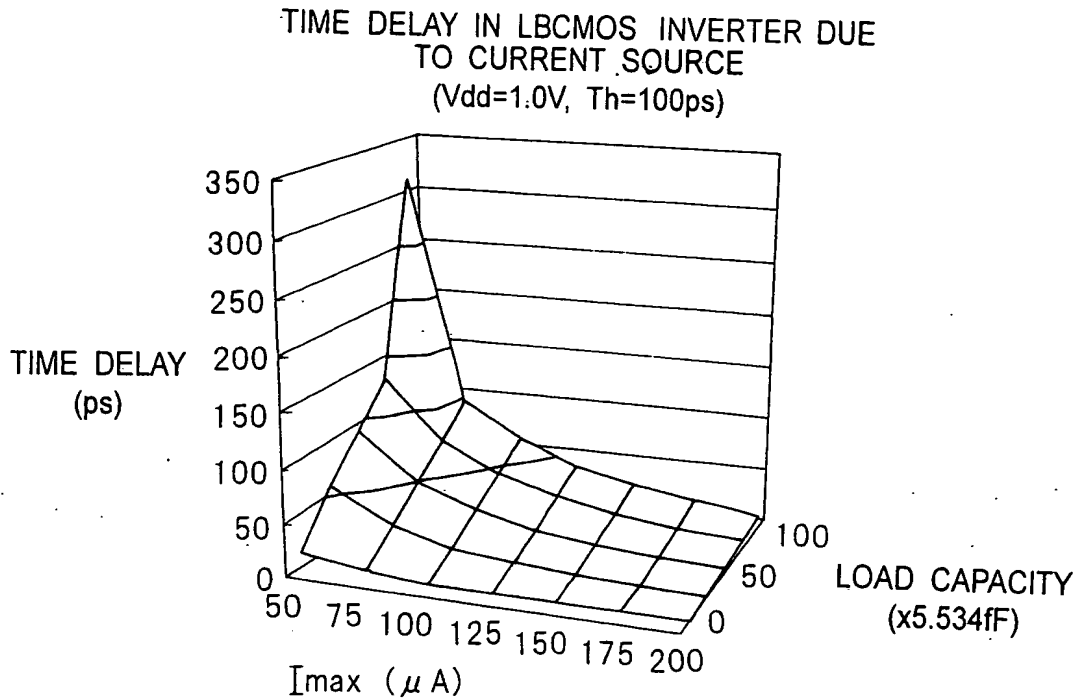
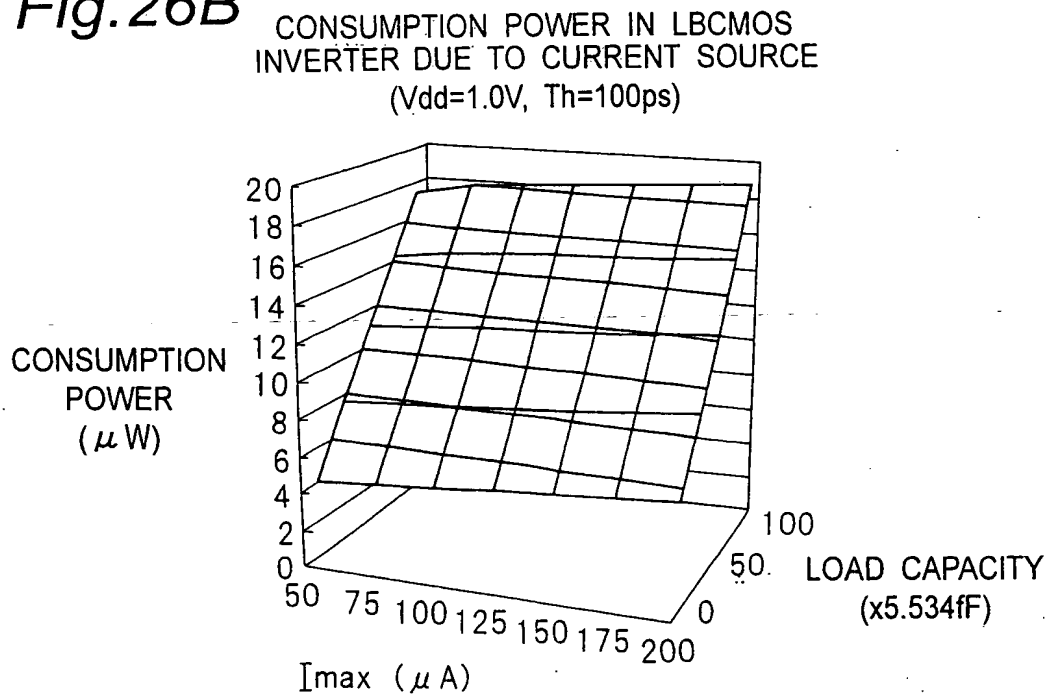
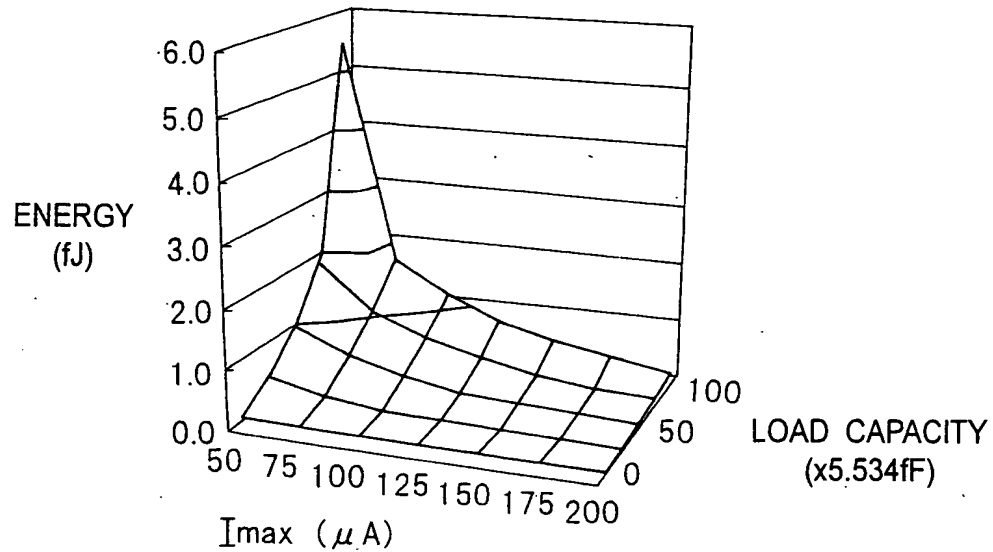
Fig.26A**Fig.26B**

Fig.27A

ENERGY IN LBCMOS INVERTER DUE
TO CURRENT SOURCE
(Vdd=1.0V, Th=100ps)

**Fig.27B**

DELAY PRODUCT IN LBCMOS
INVERTER DUE TO CURRENT SOURCE
(Vdd=1.0V, Th=100ps)

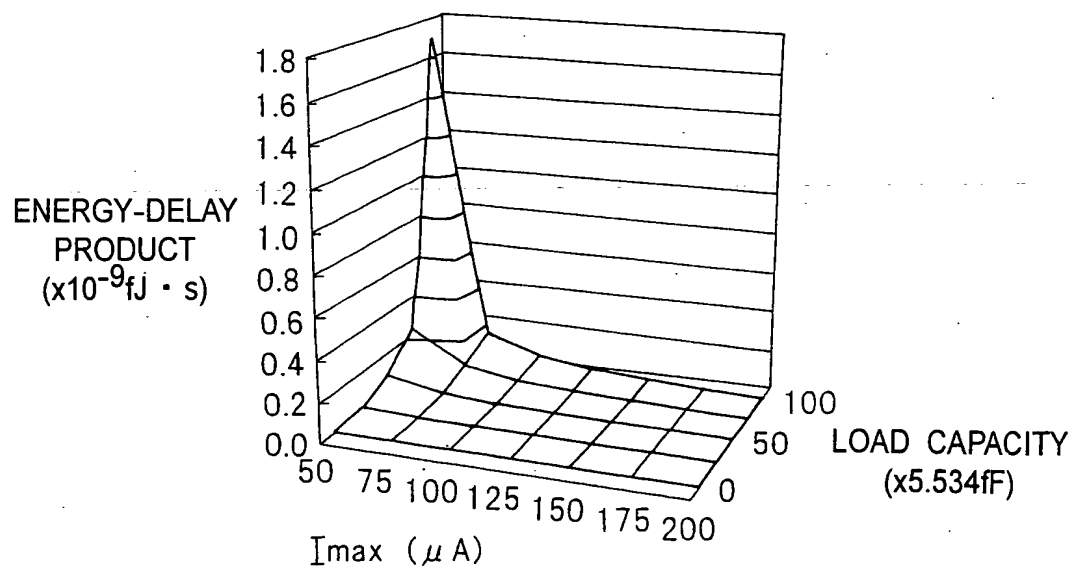


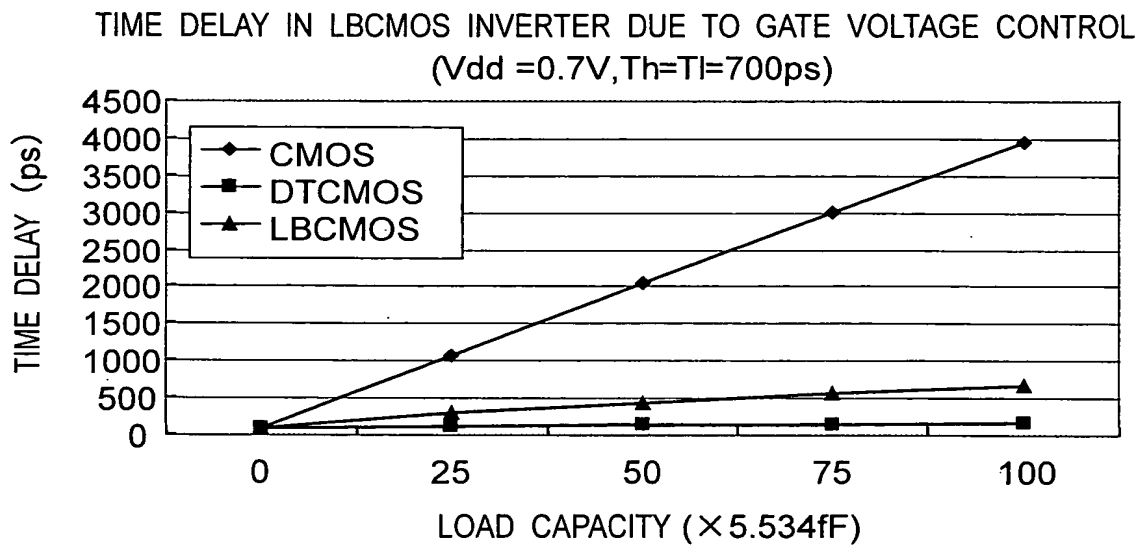
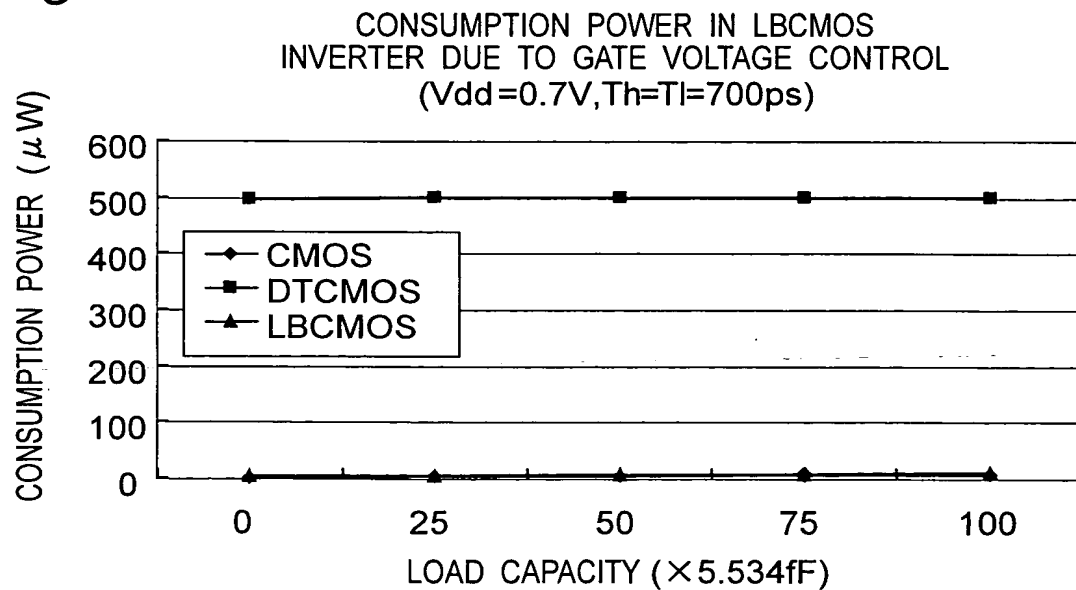
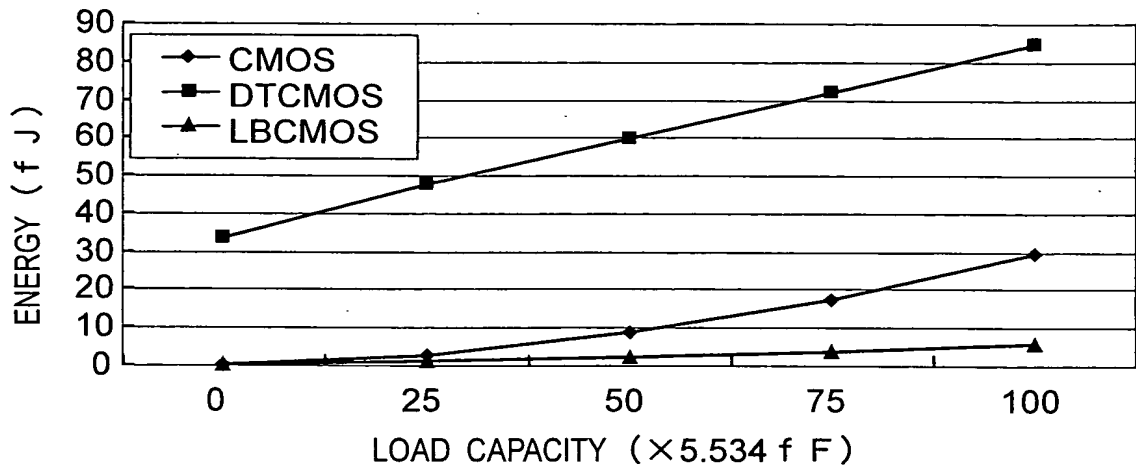
Fig.28A*Fig.28B*

Fig.29A

ENERGY IN LBCMOS INVERTER DUE TO GATE VOLTAGE CONTROL
($V_{dd}=0.7V$, $T_h=T_f=700ps$)

*Fig.29B*

ENERGY-DELAY PRODUCT IN LBCMOS
INVERTER DUE TO GATE VOLTAGE CONTROL
($V_{dd}=0.7V$, $T_h=T_f=700ps$)

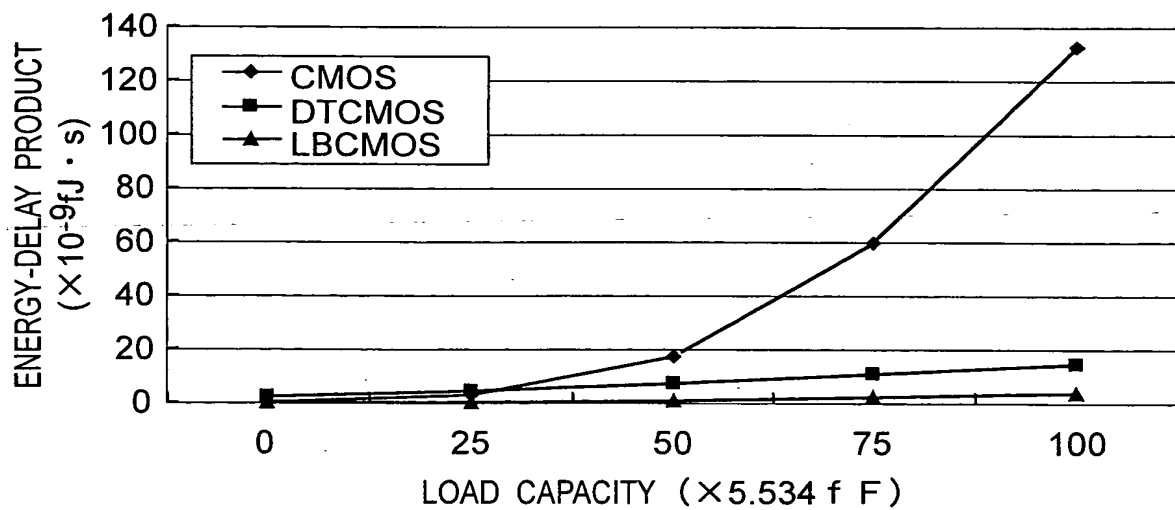
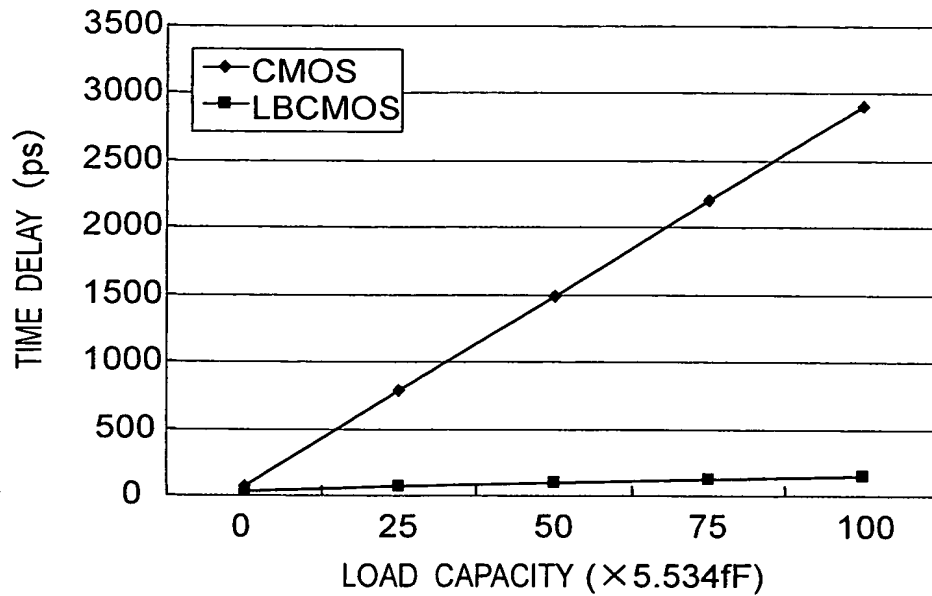


Fig.30A

TIME DELAY IN LBCMOS INVERTER DUE TO GATE VOLTAGE CONTROL
($V_{dd}=1.0V, T_h=T_l=700ps$)

**Fig.30B**

CONSUMPTION POWER IN LBCMOS INVERTER DUE TO GATE VOLTAGE CONTROL
($V_{dd}=1.0V, T_h=T_l=700ps$)

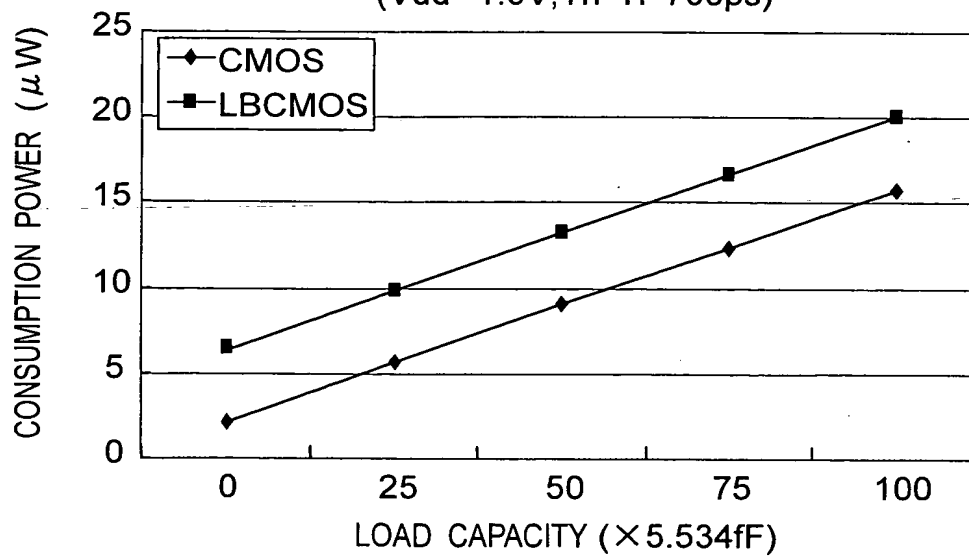


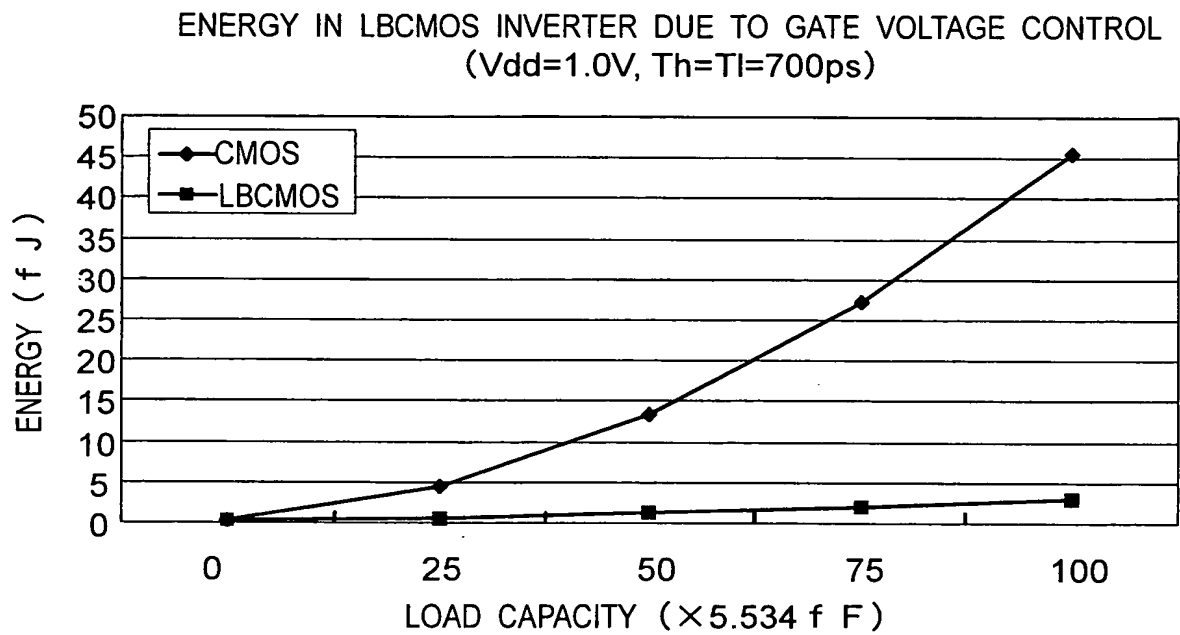
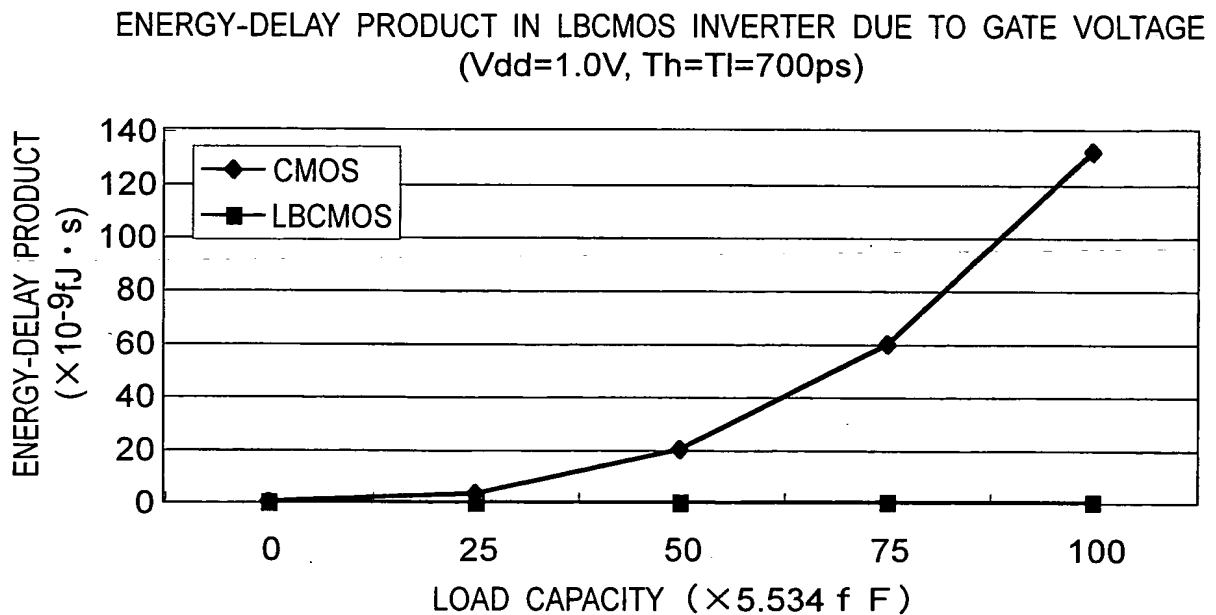
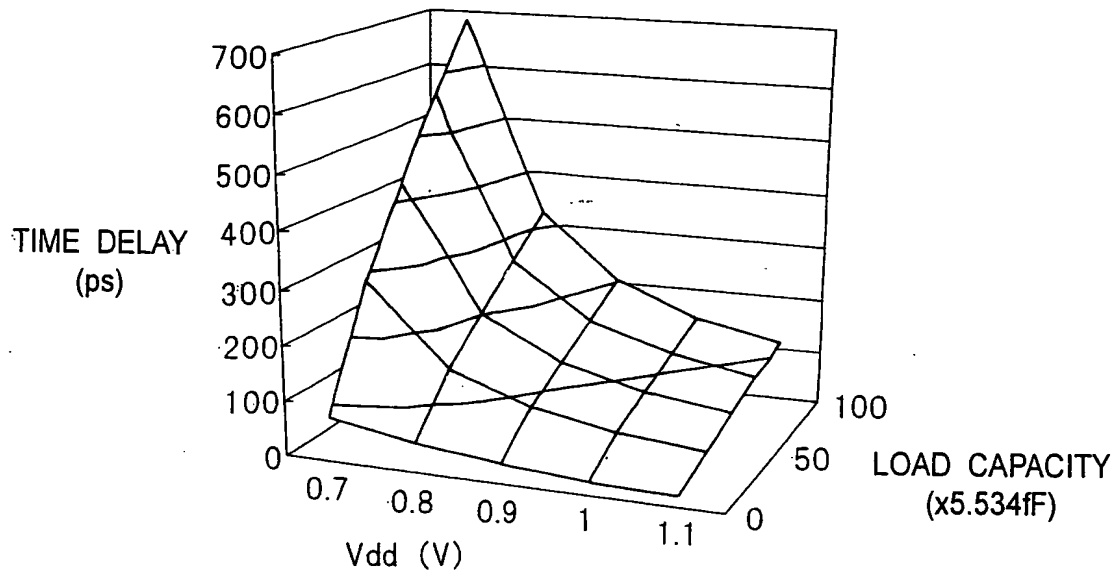
Fig.31A*Fig.31B*

Fig.32A

TIME DELAY IN LBCMOS INVERTER DUE
TO GATE VOLTAGE CONTROL
($T_h=T_l=700\text{ps}$)

*Fig.32B*

CONSUMPTION POWER IN LBCMOS
INVERTER DUE TO GATE VOLTAGE CONTROL
($T_h=T_l=700\text{ps}$)

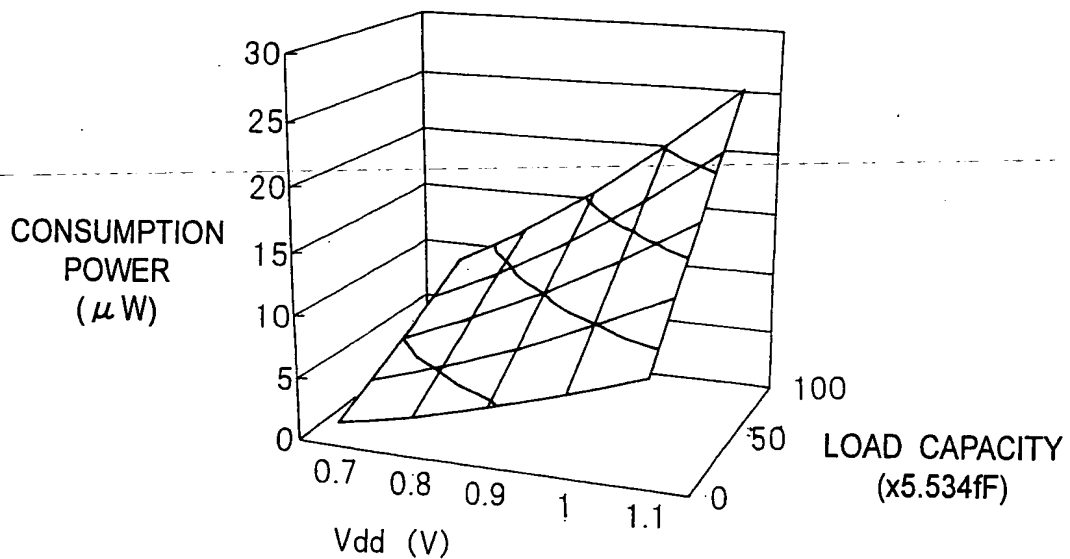
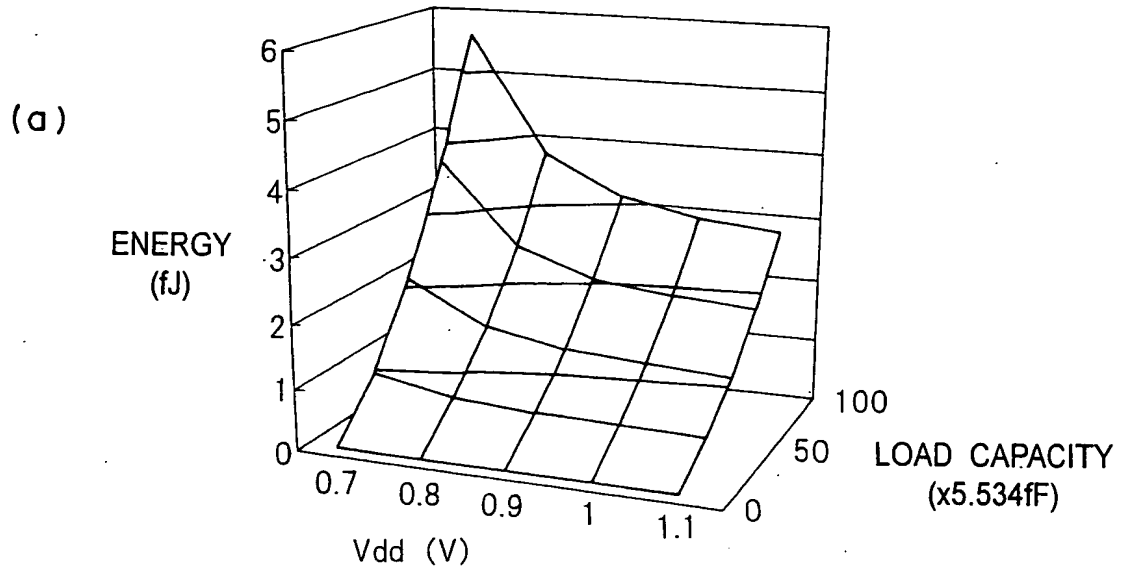


Fig.33A

ENERGY IN LBCMOS INVERTER DUE
TO GATE VOLTAGE CONTROL
($T_h=T_l=700\text{ps}$)

*Fig.33B*

ENERGY-DELAY PRODUCT IN LBCMOS
INVERTER DUE TO GATE VOLTAGE CONTROL
($T_h=T_l=700\text{ps}$)

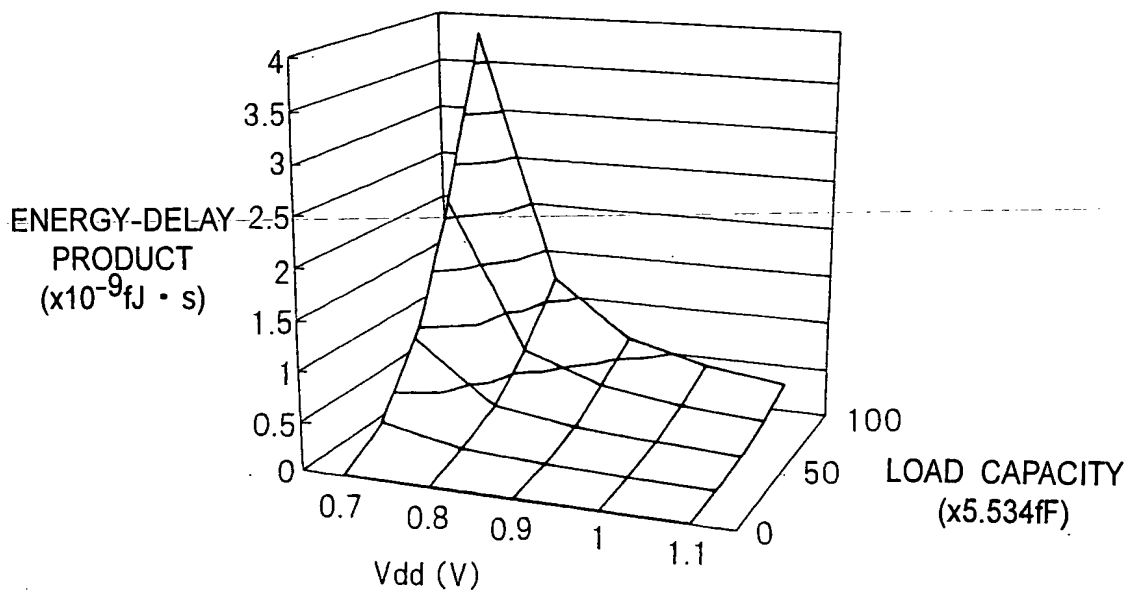
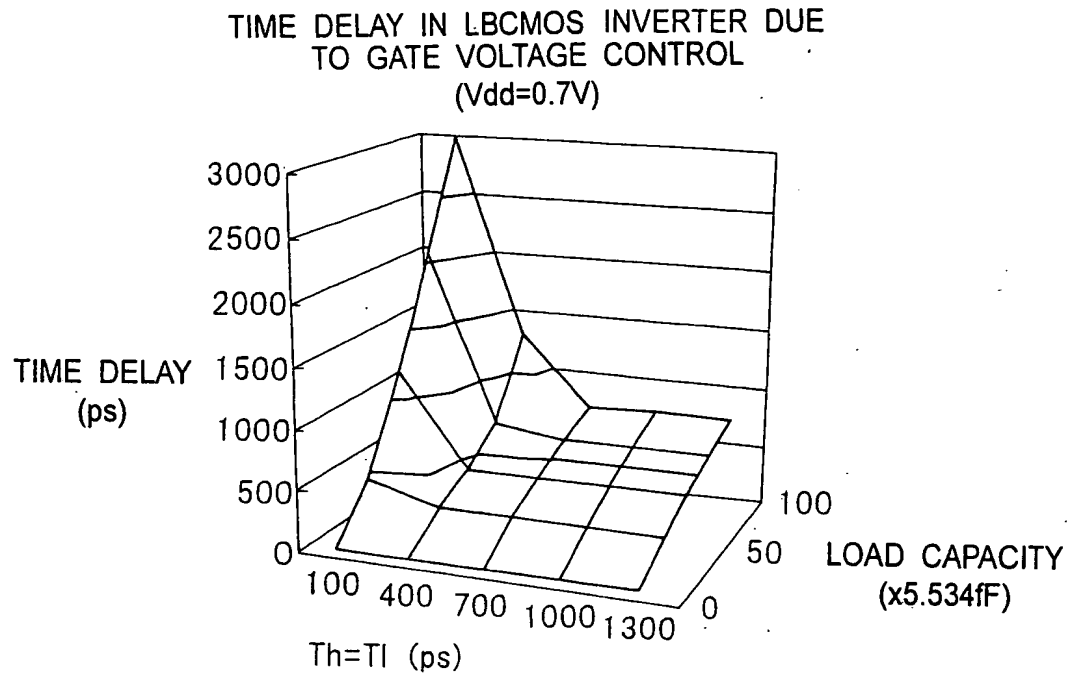
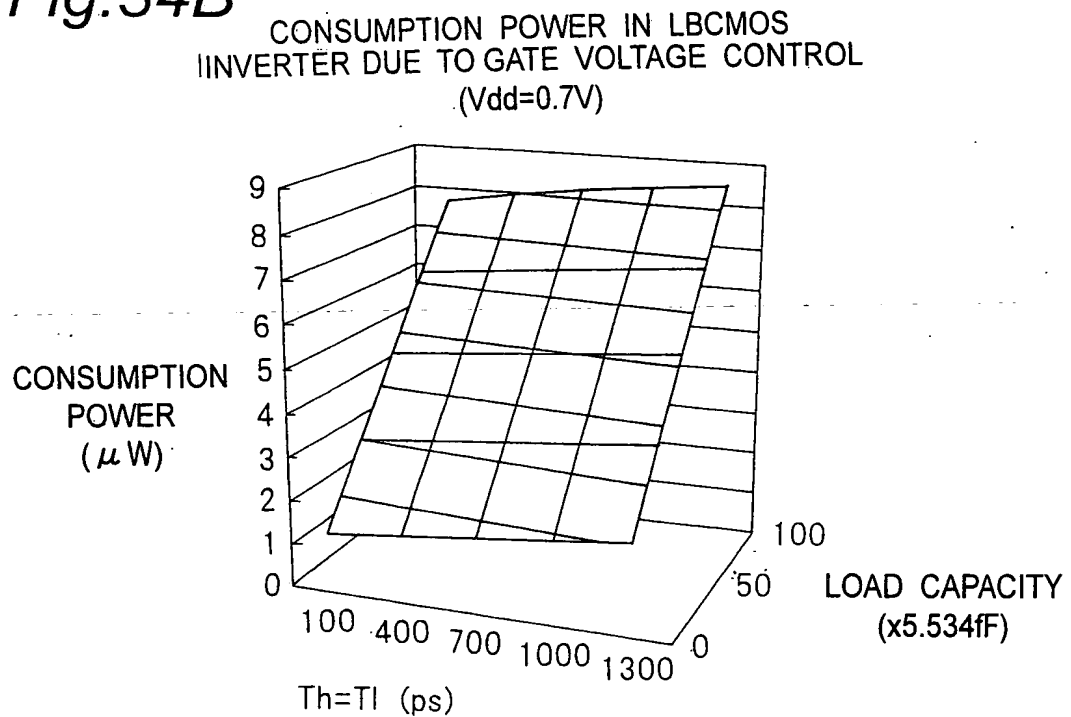
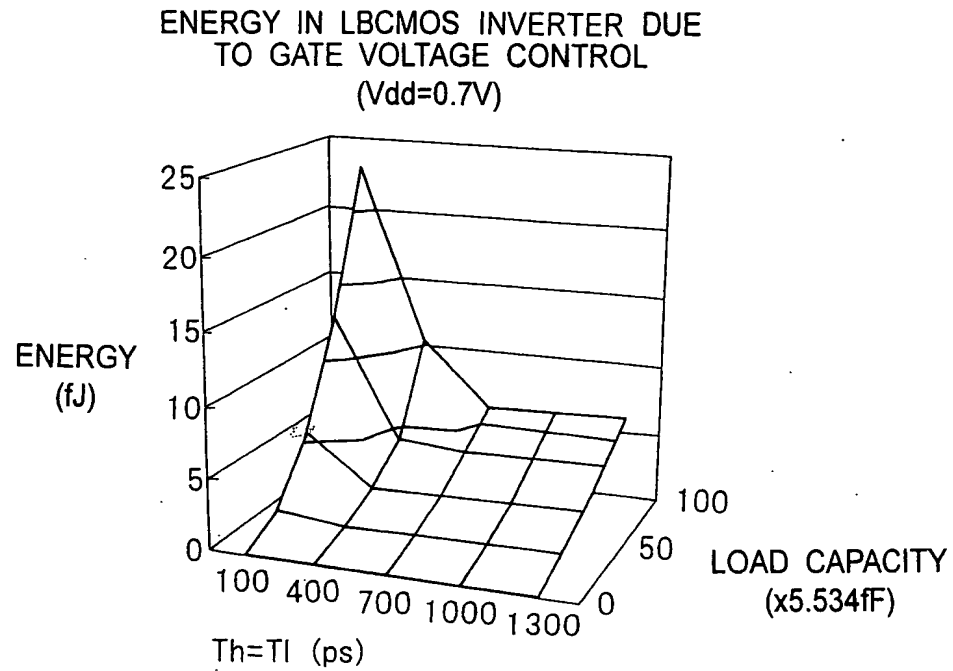


Fig.34A*Fig.34B*

35/35

Fig.35A*Fig.35B*